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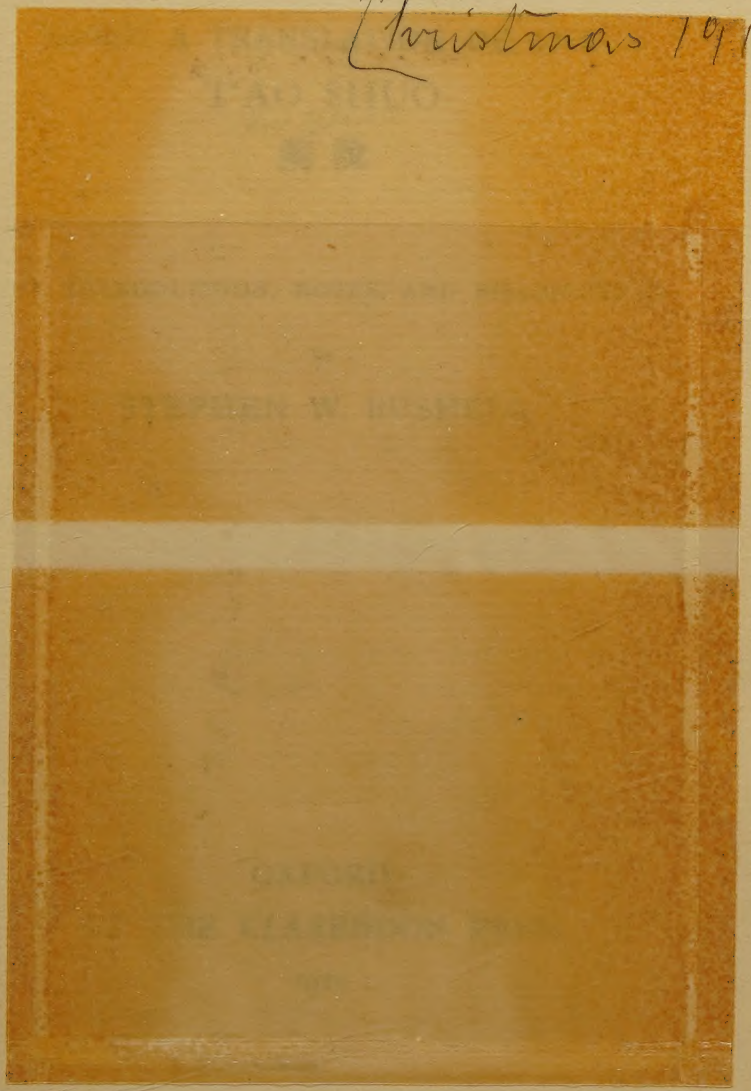

# DESCRIPTION OF CHINESE POTTERY AND PORCELAIN

BEING A TRANSLATION OF THE

T'AO SHUO

Tao Yen

陶說

WITH INTRODUCTION, NOTES, AND BIBLIOGRAPHY

BY

STEPHEN W. BUSHELL

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# NOTE

THE translation of the *T'ao Shuo*, now for the first time published in its entirety, was completed by Dr. Bushell in 1891, and has been printed with little alteration from the MS. as he then left it. Of the twenty-one figures with which he contemplated illustrating the work, eighteen were to be taken (see pp. xi, xvii) from the sixteenth-century Manuscript Catalogue of porcelain by Hsiang Yuan-P'ien. This work was published by Dr. Bushell in 1908 (*Chinese Porcelain of Different Dynasties*: eighty-three plates in colour by W. Griggs; with the Chinese text reproduced by line-blocks, and an introduction, translation, and commentary: Clarendon Press).

It may be mentioned that a set of Chinese illustrations of the manufacture of porcelain similar in style to those described on pp. 7–30 is reproduced in Stanislas Julien's *Histoire et Fabrication de la Porcelaine Chinoise*, Paris, 1856. They are only fourteen in number instead of the twenty described in the text of T'ao Shuo; those wanting being Nos. 3, 8, 12 (which bears the same title as 7), 14, 19 and 20. Two of the remaining three have been reproduced in Cosmo Monkhouse's *History and Description of Chinese Porcelain*, 1901, and in Dr. Bushell's South Kensington Museum Handbook, *Chinese Art*, 1906.

The *Lettres du Père d'Entrecolles* mentioned on p. ix have been added in an Appendix. The text has been printed, practically without alteration, from a copy of the *Lettres Édifiantes* in the British Museum.

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[1] The numbers in brackets are the plate-numbers in *Chinese Porcelain of Different Dynasties*.

# INTRODUCTION

## BY THE TRANSLATOR

The *T'ao Shuo*, 'Description of Pottery,' in Six Books, by Chu Yen, was the first special work written upon the subject of Chinese Ceramics, and is still generally considered by native connoisseurs as the chief authority on the subject. I translated it for my own use some years ago; and when Mr. W. M. Laffan, the well-known publisher of 'The Sun', wrote to me last year from New York, calling my attention to the fact that we had no books of reference in English from original sources, and asking if I would undertake the translation of this one, I was pleased to offer him the MS., after the thorough revision which a more extensive knowledge of Chinese porcelain showed to be required. There are some important collections in America, notably those made by Mr. Dana of New York, and by Mr. W. T. Walters of Baltimore, and I hope that this book may be of some use as an aid to their classification.

The author Chu Yen, known also as Chu T'ung-ch'uan, or by his literary title of Li-t'ing, was a native of Hai-yen, in the province of Chêkiang. In the year 1767, as we learn from the third preface (p. 170), he was engaged by Wu, Governor of the Province of Kiangsi, and given an appointment under the jurisdiction of the Governor, and he seems to have been stationed there up to the time of the publication of his book in 1774. During his residence in this province he made a personal investigation of the processes of manufacture of porcelain at Ching-tê Chên, the celebrated site of the Imperial factories, as well as of the private potteries which supply the whole of China in the present day. Ching-tê Chên is situated on the south bank of the Ch'ang River, and the porcelain

when packed is shipped down this river into the Po-yang Lake, and across this lake to Kiukiang on the Yang-tzŭ River, where it is transhipped, and from this port it is distributed to all parts of the empire under the name of Kiukiang porcelain, to distinguish it from the Imperial porcelain (*kuan yao*), which is sent by way of the Grand Canal twice a year to Peking.

Our author seems to have been a most voluminous writer, judging from a long list of his works given in the last preface (p. 172), which was composed by a relative of his for a new edition of the *T'ao Shuo*, published in the year 1787. This list comprises twelve different works, besides the present one, which is described as the most important of all, and includes—'A Commentary on the *Shuo Wên*' (an ancient dictionary of the second century A. D.), 'Selections from old prose authors and poets of the T'ang and other dynasties', 'Instruction on Playing the Lyre', 'On the Art of Writing Verses', &c., winding up with a 'Collection of Verses of his own (Li-t'ing's) composition'.

These works indicate the general bent of his mind to be that of a scholar and antiquary, and he often breaks off into a disquisition into the origin of a piece of pottery, or the derivation of a new name, in a way which may prove wearisome to one who is not interested in Chinese philology. Some of the names, like that of the alms-bowl (*pâtra*), and the water-jar (*kuṇḍikâ*), of the Buddhist mendicant, he even traces back to the original Sanscrit. His conclusions seem to be generally correct, if it be not presumptuous in me to offer an opinion on such a recondite subject; and he does not indulge us, *more Sinico*, with too many of his poems, although he finishes with a verse of his own, to cap some others written in honour of Hao Shih-chiu, the celebrated potter of the end of the Ming Dynasty.

The form of the book is that of a series of extracts, gathered from the vast field of native literature, loosely strung together, and accompanied by a running com-

mentary by the author. The titles of the books quoted are usually prefixed. I have collected a hundred and five of the principal of these titles in an Appendix, headed 'Bibliography', and arranged them in alphabetical order for convenience of reference, with a brief note on the scope of the different works and the approximate date of each.

I have not given the Chinese characters on account of the difficulty of printing them, but may refer those interested in the subject to the excellent glossary at the end of Stanislas Julien's 'Translation of the *Ching-tê Chên T'ao lu*',[1] a book to which all students of Chinese Ceramics owe so much, accompanied as it is by technical notes by Salvétat, the chemist attached to the Imperial Porcelain Manufactory at Sèvres, who had the opportunity of analysing two collections of the colours employed in the decoration of porcelain brought from China for the purpose. A valuable independent authority is the Jesuit missionary Père d'Entrecolles, who frequently resided at what he calls his *Chrétienté* at Ching-tê Chên, and wrote from there two letters[2] upon the porcelain manufacture, dated 1712 and 1722, towards the close of the long reign of the Emperor K'ang-hsi, the culminating period of ceramic art in China. Where these two authorities differ it is usually the worthy missionary who is right; as, for instance, in the question of the colour of the glaze of the old Lung-ch'üan porcelain, which he states to be green, bordering upon olive, while Julien will have it to be blue. This is an interesting subject on account of its bearing on the old céladon dishes found in such quantities in Persia, Egypt, and other countries on the coasts of the south-west of Asia and the east of Africa. This is probably the kind of porcelain of which forty pieces were sent as presents

[1] 'Histoire et Fabrication de la Porcelaine Chinoise', traduit du Chinois par M. Stanislas Julien. Paris, 1856.

[2] 'Lettres du Père d'Entrecolles, Missionnaire de la Cie. de Jésus. Lettres Édifiantes et Curieuses'; see Appendix.

in the year 1171 by Saladin to Nur-ed-din.[1] It seems to have been through Egypt that it first reached Europe; at any rate a present of porcelain vases was sent by the Sultan of Egypt to Lorenzo de' Medici in 1487. The Chinese, on the other hand, owe some of the designs used in the decoration of porcelain to the West, as well as material for colouring it; for, as far back as the tenth century, the Annals of the Sung Dynasty (Book ccccxc, fol. 42), describe the Arabs (*Ta-shih*) as bringing to China, among other presents for the Emperor, pieces of *wu ming yi*, the cobalt blue, which had long previously been employed in Western Asia in the decoration of faience.

It is impossible to discuss satisfactorily the shape, decoration, and glaze of the many old varieties of porcelain and pottery referred to in books, without actual inspection of specimens. Such specimens are rare, even in China, and of some of the factories described they can hardly exist. Ancient Chinese settlements were generally in the valleys of the great rivers, the sites have become buried under heaps of alluvial detritus, and it is only when the Yellow River, for example, in its erratic course, digs a new trench through the plain, that any old remains are brought to light. Most of the earliest objects discovered in this way, which were decorated by the Chinese artist for sacrificial purposes or ornamental use, were moulded of bronze, and native collectors have published many illustrated catalogues of such bronze antiques, of which some are referred to in the following pages. These bronze vessels supplied many of the forms in which the first porcelain pieces were moulded, as well as the ornamental designs used in their decoration.[2]

[1] Catalogue of a Collection of Oriental Porcelain and Pottery, by A. W. Franks, F.R.S., F.S.A., Science and Art Department, South Kensington. Second edition, 1878.

[2] 'Dissertation on the Ancient Chinese Vases of the Shang Dynasty from 1743 to 1496 B.C.' P. P. Thoms. London, 1851.

'Description de la Chine', par M. G. Pauthier.—Illustrations 38–44, containing a selection of bronze vases from the *Hsi Ch'ing Ku Chien*,

Illustrated Collections of Porcelain are much more rare, and I was unusually fortunate in my discovery of the Manuscript Catalogue of the sixteenth century, in which the artist and collector, Hsiang Yuan-p'ien, painted in water-colours, and described, a fairly representative series of eighty-two of the pieces appreciated in his time. I described this at length in a paper read before the Peking Oriental Society in 1886, accompanied by some extracts from the book before us. Now I will in revenge try to reproduce some of the plates to illustrate the *T'ao Shuo*, although I hope soon to be able to publish the Catalogue in full. But first it is necessary to say a word on the origin and history of porcelain in China.

The title of our book, *T'ao Shuo*, would be more correctly rendered 'Description of Pottery'. *T'ao* means 'pottery' in its widest sense, and includes all kinds of clay vessels fired in the kiln, the different varieties of earthenware and stoneware as well as porcelain. The Chinese have from the most ancient times cultivated the art of welding clay, and, like most of the great nations of antiquity, they claim for themselves the invention of the potter's wheel. It is generally ascribed by them to the ancient Emperor *Shun*, who is supposed to have reigned during the third millennium B.C.; but some attribute it to his still more fabulous predecessor *Huang-ti*, who is given by them a Director of Pottery among the other officers of his court. In more historical times, about a thousand years B.C., *Wu Wang*, the founder of the Chou, the third of the three ancient dynasties, is recorded to have sought out a lineal descendant of the ancient Emperor *Shun*, on account especially of his skill in pottery, to have given him his eldest daughter in marriage, and to have appointed him feudal ruler of the state of Ch'ên (now Ch'ên-chou Fu in the province of Honan), to keep up there the ancestral worship of his

the large catalogue of the Emperor Ch'ien-lung, published in 1749, in forty-two folio volumes, with 1444 figures of objects in the Imperial Collection.

accomplished ancestor. Tradition has it that he was the first Director of Pottery under the new dynasty, an official often alluded to in the Ceremonial Classic and other ancient records. In the *K'ao kung chi*, a relic of the same dynasty, there is a short section on pottery, quoted below, in which the processes of fashioning on the wheel and moulding are clearly distinguished. But we have no specimens of these things left. They are supposed to have been fashioned of common clay (terra-cotta), and it is doubtful even whether this was covered with a coloured glaze of any kind.

'*Porcelain*' is *tz'ŭ*, which is defined in the oldest dictionaries as a 'fine, compact pottery' (*t'ao*). In our definition of porcelain we should add 'translucent', but this is not necessary according to Chinese notions, as they would call any thick opaque piece *tz'ŭ*, if it gave out a clear resonant note on percussion, this being the practical test by which they distinguish porcelain. Mr. Franks (l. c., p. xviii), observes that 'there is considerable difficulty in distinguishing glazed vases of Chinese pottery from true porcelain, as the coloured glaze in many cases conceals the material, and the thickness prevents their being translucent, a distinguishing character of porcelain, and the substance of many of the vases is coarse, sometimes grey or even red, and such as would in European fabrics be termed stoneware.'

In fact, ordinary faience passes by imperceptible gradations into porcelain when the materials are more scientifically and intimately blended and the fire made more intense. For the same reason it is difficult to fix the date of the invention of porcelain, which suddenly appears in Chinese official records in the fourth year (A. D. 621) of the reign of Wu-tê, the founder of the T'ang Dynasty, as ordered by the Emperor to be made at Ch'ang-nan Chên (the modern Ching-tê Chên), and sent from there to the Capital (Hsi-an Fu) for the use of the palace. The vessels are described as made of fine white clay and of thin fabric, the best being of as brilliant and pure a colour as jade, so that they were known at the

time by the name of 'false jade vessels' (*chia yü ch'i*), and were undoubtedly of true porcelain. One earlier date is given in the Records of this district, that of a decree of the last ruler of the Ch'ên Dynasty issued in 583, ordering a supply to be sent to Chien-k'ang (now Nanking) for the Emperor's use.

These same Topographical Records (*Fou-liang Hsien Chih*), in the Section headed *T'ao Chêng*, 'Administration of Porcelain,' say that porcelain was first made in the district of Hsin-p'ing. Julien (l.c., pp. xx, xxi), starting from this short note, attributes the invention of porcelain to Hsin-p'ing Hsien (the modern Huai-ning Hsien, in the Province of Honan), which was founded under that name in 185 B.C. by the Emperor Kao Ti of the Eastern Han Dynasty, the name being changed in A.D. 88. 'Il s'ensuit qu'on peut placer l'invention de la porcelaine entre les années 185 avant et 87 après J.-C.' This argument is neat, but founded unfortunately on a misapprehension. Hsin-p'ing was really the original name of Fou-liang Hsien, as we see by referring to the Geographical Section of the Annals of the T'ang Dynasty (*T'ang Shu*, Book lx, f. 25), which say that this walled city was founded under the name of Hsin-p'ing, in the fourth year of Wu-tê (A.D. 621), with jurisdiction over a part of the old district of Po-yang, re-established in the fourth year of K'ai-yuan (716), under the name of Hsin-ch'ang, and changed finally to its present name of Fou-liang in the first year of T'ien-pao (742).

In another part of the same book (p. 82), referring to porcelain made by Ho Chung-ch'u for the use of the Emperor in the year 621, in which the said Ho is described as a native of Hsin-p'ing, Julien strangely says in a note that this refers to another Sin-ping, corresponding to the modern Pin-chou, in the province of Shensi, which was called so during the Eastern Han (A.D. 25–220), but not since, an anachronism of at least four centuries. Hsin-p'ing is referred to more than once in the last three books of the *Ching-tê Chên T'ao lu*, which are omitted in Julien's

Translation, as in an extract from the biography of Chu Sui, styled Yü-hêng, an official of the T'ang Dynasty, who was Superintendent at Hsin-p'ing, when, in the first year of the period Ching-lung (A. D. 707), a decree was received by the Governor of Hung-chou, ordering him to supply with all speed sacrificial utensils for the Imperial tombs. Chu Sui is described there as energetically pushing on the work so that they were sent within the year. This Hung-chou is the modern Nan-ch'ang Fu, chief city of the province of Kiangsi, and Jao-chou, within the bounds of which lies Fou-liang Hsien, is stated in the Annals of the T'ang Dynasty as having been at that time actually under the jurisdiction of the Governor of Hung-chou. I am afraid therefore that we must give up the Han Dynasty as furnishing a date for the invention of porcelain.

Some European writers doubt the existence of transparent porcelain even as early as the T'ang Dynasty, in my opinion without reason, the product of the factory at Yueh-chou being described by contemporaries as translucent like jade, and as being, like the white porcelain fabricated at Hsing-chou, so resonant as to be used in sets of 'musical cups' to play tunes upon. This is confirmed by an Arab traveller who was in China in the ninth century, and who furnishes the first mention of porcelain outside the country[1]—'There is in China a very fine clay with which they make vases which are as transparent as glass; water is seen through them. These vases are made of clay.'

There were no painted designs upon the porcelain of this period. The decoration consisted in the different colours of the monochrome glazes, which are distinguished in the books of the period, according to the suitability of the colour in bringing out the tint of tea or wine. Jade, the most precious of stones in native eyes, seems to have supplied the first motive of decoration, and the earliest

[1] 'Relation des Voyages faits par les Arabes et les Persans dans l'Inde et à la Chine dans le ix^e^ siècle de l'ère chrétienne', par M. Reinaud, Membre de l'Institut. Paris, 1845.

specimens are accordingly described as either white or green; especially as green, and this seems without doubt to be the colour of the glaze of the famous *pi-sê* (secret or prohibited colour) porcelain, said to have been so called because it was reserved for Imperial use. A verse is quoted in the *T'ao lu* (Book ix, f. 2) from a Selection of Poetry of the T'ang Dynasty, as having been composed by Hsü Yin, to accompany a service of *pi-sê* teacups made for presentation to the Emperor, which runs:—

'Like bright moons cunningly carved and dyed with spring water:
Like curling disks of thinnest ice, filled with green clouds:
Like ancient moss-eaten bronze mirrors lying upon the mat:
Like tender lotus leaves full of dewdrops floating on the river-side!'

These similes could apply to nothing but green, and, moreover, the glaze at the time was generally called the 'colour of distant hills'. The difficulty lies in the ambiguity of the Chinese word *ch'ing*, the original meaning of which is the 'green of growing plants', but which in ceramics is used for all shades of clear greens and blues, from the olive-green and grass-green of ancient Lung-ch'üan ware to the deep sapphire blue of more modern monochromes, and the brilliant blue of the blue and white of the hawthorn vases of the reign of K'ang-hsi. Julien, for the sake of consistency, always renders *ch'ing* 'blue', so that some of his translations require correction. A favourite colour in old glazes is the indeterminate tint known as 'sea-green' or 'céladon'. Chinese authors also fully appreciate this difficulty. Chêng T'ing-kuei, the editor of the *T'ao lu* (Book x, f. 8), says:—'For ancient porcelain *ch'ing* (green) was preferred as harmonizing with the different kinds of tea and wine, while for the banqueting-table plain porcelain, or white painted in blue, is the best.' He quotes a series of authors of the T'ang Dynasty to prove that the colour preferred was really green, and not like the *ch'ing* of the Ch'ai porcelain of the tenth century,

which was described at the time as being 'blue as the sky, brilliant as a mirror, thin as paper, and resonant as a musical stone.' He adds—'Among the porcelain called by this one name of *ch'ing*, in the Ch'ai porcelain and the porcelain of Ju-chou, the *ch'ing* colour approached a light blue, in the Imperial porcelains of the Sung Dynasty, and in that of the Ko, Tung, and Hsiang factories, the *ch'ing* approached a pale emerald colour, in that of the potteries of Lung-ch'üan it approached a deep green, while in that of Yueh-chou and Yo-chou it approached the bluish green of some silk dyes. The old authors in describing porcelain call all these different colours *ch'ing*.' The same blue material called *ch'ing liao*, a cobaltiferous ore of manganese, was employed in the preparation of all these coloured glazes referred to above, which makes their distinction all the more difficult.

But it is most unsatisfactory to discuss the different shades of colour of porcelain glazes after mere verbal description. In some cases, as in the old *céladon*[1], the Lung-ch'üan ware, which is common throughout China, and which was so widely distributed at the time, that Persia and Egypt have furnished a collection for the Dresden Museum[2], and Zanzibar, through Sir John Kirk, to the British Museum, genuine old pieces are before us, so that it is not necessary to theorize on the subject. A minute's handling is better than a page of description, especially when it has to be translated from such a language as the Chinese. Next in value to an actual specimen comes a coloured picture of the object. How would it be possible without some such help to be certain of the meaning of *Hung yü pa pei*, literally 'Red fish handled cups', the name of the famous wine-cups of the reign of Hsüan-tê of the Ming Dynasty. Julien translates 'cups having the handle ornamented with a red fish', whereas

[1] 'Ancient Porcelain. A Study in Chinese Mediaeval Industry and Trade.' By F. Hirth, Ph.D. Leipsic and Munich, &c., 1888.

[2] 'Lung-ch'üan-yao oder Altes Seladon-Porzellan', von A. B. Meyer. Berlin, 1889.

the plate (Fig. 12) shows the handle (*pa*) to be really a foot or stem, the cup being moulded in a shape somewhat resembling that of the modern egg-cup, and decorated with three red fish painted on the bowl.

This brings us to the Illustrated Catalogue, to which I have already alluded, from which I have taken this picture, together with seventeen others, chosen out of the eighty-two pieces figured in the original, to illustrate this translation of the *T'ao Shuo*. These eighty-two pieces, as I mentioned in my pamphlet[1], include forty-two referred to the Sung Dynasty (A. D. 960–1279), only one piece of the Yuan (1280–1367), the remaining thirty-nine belonging to the Ming Dynasty, of which five reigns are represented, viz. Yung-lo (1403–24) by one piece, Hsüan-tê (1426–35) by twenty pieces, Ch'êng-hua (1465–87) by ten pieces, Hung-chih (1488–1505) by four pieces, and Chêng-tê (1506–21) by two pieces; the number being made up by two pieces of 'boccaro' ware not dated. The Manuscript Catalogue, which has been described in my pamphlet quoted above, came from the Collection of the hereditary Princes of Yi in Peking.

It is entitled *Li tai ming tz'ŭ t'u pu*, 'Illustrated Description of the Celebrated Porcelain of different Dynasties.' It was compiled by Hsiang Yuan-p'ien, about the end of the sixteenth century, and shows what things were appreciated by connoisseurs 300 years ago. The author is included in the 'Imperial Cyclopedia of Celebrated Writers and Artists', as both a calligrapher and an artist, and described there in a short biography as 'fond of collecting ancient inscriptions from stone and metal, as well as paintings of famous artists,' and also as 'a skilful painter of old trees, of the flowering plum, and of orchids.' He says in his Preface:—

'In ancient times, while *Shun* was still living in the midst of the fields, he tilled the ground, sowed grain,

[1] 'Chinese Porcelain before the Present Dynasty.' By S. W. Bushell, M.D. (Extract from the *Journal of the Peking Oriental Society*). Peking, Pei-T'ang Press, 1886.

made pottery and fished, to gain his livelihood, so that even before the Three Ancient Dynasties, the art of welding clay was already practised. But long years have passed by since these remote times, and no specimens of his work have survived.

'Passing on through the Ch'in, Han, Wei, and Chin Dynasties, we come to the earliest mention of the names of makers, in the wine-cups of Chi Shu-yeh and the wine-vessels fabricated by Hsü Ching-shan. The successors of these two, working day by day and from month to month, kept on turning out an abundant supply, till we arrive at the rule of the House of Ch'ai, which was the first to become celebrated for its pottery, so much so that in these days men search for a mere fragment of its porcelain without being able to find one, and declare it to be only a phantom.

'Next after this Ch'ai pottery, the fabrics of Ju-chou, of the Imperial Factories of the Sung, of the Ko Potteries, and of Ting-chou, follow in their order, till finally we come to our own sacred dynasty, and have before us pieces of porcelain of the reigns of Yung-lo, Hsüan-tê, Ch'êng-hua, and Hung-chih, to compare with specimens of the Sung, and find that they even surpass them, excelling in fabric and in form, as well as in the colouring of the glaze.

'I have acquired a morbid appetite for "scabs", and delight in buying choice pieces of the three dynasties of Sung, Yuan, and Ming, and displaying them as ranking equal with the bells, caldrons, sacrificial dishes, and wine-vessels of ancient bronze, dating from the Three Ancient Dynasties, the Ch'in and the Han.

'With the help of two or three intimate friends, meeting constantly, both by day and night, for discussion and research, gathering only examples which we have actually seen or have in our own possession, I have arranged them in order and compiled this catalogue. I have painted the illustrations in colours, and related the source of each one, in order that I may preserve them from being lost

or forgotten, and be able to exhibit them to my friends. Let no one remind me of my scant and sparse hair, and taunt me for having produced what is fit only for a child's toy.

'Written by Hsiang Yuan-p'ien, styled Tzŭ-ching, a native of Chia-ho (now Chia-hsing Fu).'

The impressions of two of his seals in red follow—'The Seal of Hsiang Yuan-p'ien' and 'The Dweller in the Hills at Mo-lin.'

Of the pieces figured, all those of the Ming Dynasty, with the exception of two teapots of porous 'boccaro' ware from Yi-hsing Hsien, in the province of Kiangnan, come apparently from Ching-tê Chên in Kiangsi, the well-known seat of the Imperial porcelain factory of the period, already monopolizing the production. The forty-two specimens of the Sung Dynasty, on the contrary, come from different parts of the empire, ten being attributed to the *Kuan yao* 'Imperial or government porcelain' made in succession at the two capitals K'ai-fêng Fu and Hang-chou; twelve to the *Ting yao* from Ting-chou in the province of Chihli, the white, brown and black glazes being all represented; three to the *Ju yao* from the celebrated potteries of Ju-chou in Honan; ten to the *Lung-ch'üan yao* and one to the *Ko yao* from Lung-ch'üan Hsien in Chêkiang; four to the *Chün yao* from Chün-chou, and two to the *Tung-ch'ing yao* from Chên-liu, both places in the province of Honan.

They are arranged according to the form and use of the different things, and include in the following order—Censers for burning incense, Ink-pallets, Pencil-rests, and Water-vessels for the Study table. Vases of varied form for holding flowers. Jars and Libation Cups for sacrificial wine. Wine-pots and cups, Teapots and teacups, Rice-bowls and dishes for ordinary use. Rouge-pots and boxes for scented unguents. Pagoda enshrining a jade image of Buddha and a miniature jar of jade containing sacred relics from India. Oil-lamps and Pricket Candlesticks of elaborate designs.

In the figures reproduced here, however, I have not followed the order of the original. The description of each piece by Hsiang Yuan-p'ien is translated by me as literally as possible.

'1. *Vase* (*Ku*) *of Ju-chou Porcelain of the Sung Dynasty.*

'This vase of slender horn-like form with wide trumpet-shaped mouth, decorated with palm-leaf designs and scroll ornament, is copied from an ancient bronze figured in the *Po ku t'u* of the Hsüan-ho period. It is of the same height and size as in the figure. Very few specimens of Ju-chou porcelain survive to the present day, and those we have are mostly cups and dishes, generally, moreover, damaged and imperfect. A perfect piece like this vase, without the least damage or the slightest crack, is extremely rare. Besides, vases of this form designed to hold flowers are all artistically finished, as compared with other things intended for commoner use. The vase is good both in its form and in the colour of the glaze, excelling the productions either of the Kuan (Imperial) or Ko factories, so that one does not marvel at the high sum at which it is valued. I saw it at the Capital (Peking) in the collection of Huang, General of the Guards, who told me that he had bought it for 150,000 cash from Yun, one of the City Magistrates.'

'2. *Ink-pallet* (*Yen*) *of Imperial Porcelain of the Sung Dynasty.*

'This Pallet was moulded after a pallet used by the Emperor, kept in the Hsüan-ho Hall of the Palace, and is of the same size and diameter as in the figure. It is made in the form of a section of a vase, with two loop handles through which string can be threaded for hanging it on the wall. A trench is cut near the margin of the upper surface to hold water, and an oval space in the centre shows the brown paste, which is left unglazed, so as to be better for rubbing the cake of ink upon, and is as

fine-grained and unctuous as the best ink-stones from the Tuan-ch'i quarries, and quite as much to be cherished. The under surface of the pallet is carved with the *t'ai* hexagram and the figure of an elephant (*hsiang*) below it. Reading this in conjunction with the vase (*p'ing*) form of the pallet, we get the fortunate augury "*T'ai p'ing yu hsiang*", "There are signs of great peace," and this is the name given to the pallet. The colour of the glaze is light green (*fên ch'ing*) marked with crackles like broken ice. It is of antique fashion and rare design, and makes truly a precious ornament for a scholar's library. Together with the little pallet of the reign of Hsüan-tê painted in blue with dragons, and the double persimmon water-pot enamelled red, both figured in this Catalogue, this one was acquired by myself at Kuang-ling (Yang-chou) from the collection of Hsü Lien-chai, Councillor in the Appeal Court.'

'3. *Incense Burner* (*Ting*) *of Ting-chou Porcelain of the Sung Dynasty.*

'This was copied from an ancient sacrificial vessel of bronze dedicated to Wên Wang, founder of the Chou Dynasty, figured in the *Po ku t'u* of the Hsüan-ho period[1], and is of the same height and size as in the illustration. It came out of the Imperial Palace, and is perfectly fashioned and delicately carved in lines as fine as bullock's hair or raw silk. The vessel stands square and upright without leaning a hair's breadth to either side, and is exactly proportioned in all its parts. The glaze is throughout clear and translucent, like mutton-fat or fine jade. It is a choice example of the best Ting-chou porcelain, fit to be placed at the head of the sacrificial vessels of the different potteries, and it is seldom that we meet with such a specimen in these days. I was permitted to see it in the palace of the hereditary Princes of Chin (descendants

[1] A similar vessel of bronze is figured by Pauthier (l. c. Illustration 38) taken from the *Hsi Ch'ing Ku Chien*.

of the third son of Hung-wu, founder of the Ming Dynasty). The stand and cover were both carved out of fragrant lign-aloes, the latter surmounted by a lizard of precious green jade.'

'4. *Incense-Burner (Yi) of Ting-chou Porcelain of the Sung Dynasty.*

'Decorated with a rectangular scroll border interrupted by two lions' heads in relief as handles; copied from a casting of Chiang of the Yuan Dynasty. Of the same height and size as in the picture. The form and design of the vessel are most elegant, and the carving finely executed in all its details. The glaze is translucent and of stainless white colour, like mutton-fat or fine jade, and it is worthy to be kept to ornament a scholar's library. It is an old piece preserved in my own family, and has stood long years upon the bookshelf, from which I have just now taken it down to draw it for the benefit of my friends.'

'5. *Small Vase (Tsun) of Chün-chou Porcelain of the Sung Dynasty.*

'This little vase, of oval shape, with two handles moulded in the form of phoenixes, was taken from a source unknown to me, or, more probably, was an original design. The form, however, is cleverly fashioned, and the ornamental work beyond the average, so that it must come from the hand of a skilful artificer. The porcelain of the Chün-chou potteries is placed at the bottom of the productions of the Sung Dynasty, yet this jar of elegant form and good colour, as a vase for holding flowers, equals, if it does not excel, any of the pieces of Ju-chou or Ting-chou, of the Imperial or Ko Factories of the Sung Dynasty. Under the foot it is marked with the numeral *wu* (five), an additional proof that it is really a specimen of Chün-chou porcelain. It is now happily in my own collection.'

'6. *Wine Pot* (*Hu*) *of Chün-chou Porcelain of the Sung Dynasty.*

'Of depressed oval form with a tiny solid triangular handle at one extremity, a short spout at the other. Decorated with formal floral and scroll patterns carved in relief under the monochrome glaze. The source of the design of this wine-pot is unknown, yet it is good and pleasing to the eye. Many of the pieces of Chün-chou porcelain were of new free designs and not modelled after antiques, so that this one is not singular in that respect. Of the coloured glazes employed none surpassed the vermilion red (*chu hung*) and the aubergine purple[1] (*ch'ieh tzŭ*), the sky-blue (*yueh hsia pai*—"*clair de lune*") and the pale green (*yu ch'ing*) being ranked lower than these two in Chün-chou porcelain. This wine-pot is a choice specimen of the aubergine purple glaze, the whole surface being covered with an ornamental design worked in relief. It holds nearly a pint of wine. There must originally have been a cover, which has somehow been lost. I acquired this from the house of Li, a seller of wine.'

'7. *Sacrificial Jar* (*So Tsun*) *of Lung-ch'üan Porcelain of the Sung Dynasty.*

'Moulded in the form of a hornless rhinoceros, after an ancient bronze vessel figured in the *Po ku t'u* of the Hsüan-ho period, of the same height and size as in the illustration. The body of the animal is hollowed out to hold the wine, and a peaked saddle fixed upon its back forms the cover. It is of ancient and good design, fit to be displayed as a ritual vessel on the altar of the ancestral temple. In these days vessels are made of pottery instead of gold and bronze, in order that the resources of the state may not be drawn upon, yet they ought not to be valued less highly. The colour of the glaze is a bright green, the tint of onion sprouts, and

[1] The aubergine, in Chinese *ch'ieh*, is the egg-plant, *Solanum Melongena.*

beautifully translucent and lustrous. I saw it at the Southern Capital (Nanking) in the room of Kuo, the Superior of the Taoist Monastery in the Temple Ch'ao T'ien Kung.'

'8. *Water Pot (Shui Chu) of porcelain of the reign of Hsüan-tê of the Ming Dynasty.*

'This is copied from an old bronze design and moulded in the form of two persimmons, hanging side by side upon a leafy branch, the stem of which is hollowed out to make a spout to pour the water through. The colour of the glaze is red as fresh blood rising in millet-like tubercles, the leaves green, the stalk brown, very like a coloured painting from nature by an artist of the school of Hsü Ch'ung. I got this, together with the two ink-pallets just described, from the collection of Hsü, Councillor of Appeal.'

'9. *Rouge Pot (Lu Hu) of porcelain of the reign of Hsüan-tê of the Ming Dynasty.*

'This is moulded in the form of a single persimmon fruit (Diospyros schitze), of the same height and size as in the picture. The colour of the glaze is as red as fresh blood, the branches and the leaves attached being shaded brown and green, exactly after the natural colours. The cover is the calyx of four sepals surmounted by the stalk of the fruit. This little pot also came out of the palace, and showed signs of having been used by one of the Imperial princesses, to hold vermilion for painting the lips and face. It was priced very high, more than a hundred taels of silver, by a curio-seller at the Buddhist Temple Pao-kuo Ssŭ [1], at whose stall I saw it when at the Capital (Peking).'

[1] This is a large temple situated outside the north-west angle of the Imperial City, where a fair is still held in the present day on certain fixed days of every month, at which curio-sellers set up their stalls and ask the same extravagant prices for their wares as of old.

'10. *Wine Pot (Hu) of porcelain of the reign of Ch'êng-hua of the Ming Dynasty.*

'This wine-pot, which is an original design, is moulded in the form of a melon, and painted in enamel colours. It is of the same height and diameter as in the picture. The reign of this Emperor, whose dynastic title is Hsien Tsung, was specially famed for the excellence of the porcelain painted in different enamel colours. This was because at that time the designs for the porcelain were all previously drawn in the palace by celebrated artists, so that the colours are laid on thickly or thinly and properly shaded, in a style that no ordinary painter could have attained. This wine-pot, for instance, is moulded in the right proportions, the melons and vine painted yellow and green after life, the upper and lower surfaces of the stalks and leaves of different shades of colour. It would make a most valuable present, and holds over a pint and a half of wine. I obtained it at Yun-chien (now Sung-chiang Fu in Kiangnan) from Liu, Graduate of the Medical College.'

'11. *Tea Cup (Ch'a Pei) of the reign of Hsüan-tê of the Ming Dynasty.*

'This tea-cup, decorated with a dragon pine in blue and white, is taken from some unknown source, but, in all probability, it was copied from a jade cup of the Han Dynasty. It is of the same height and size as in the figure. The glaze is of a uniform translucent white, like mutton-fat or fine jade, rising in minute millet-like tubercles, and the blue is so pure and brilliant as to dazzle the eyes, being painted with Mohammedan cobalt blue (*Hui ta ch'ing*). The pine has grown naturally with its leafy branches gnarled and interlacing, like the several folds of a coiling dragon, reminding one of an old fir-tree in a landscape painted by Kuo Hsi. The rocks at the foot of the pine are covered with fungus plants and orchids, sketched, as if actually growing, by the hand of no common

artist, evidently the work of one of the palace painters of the period. I purchased for ten taels four of these cups at Wu-hsing (now Hu-chou Fu in Chêkiang province) of Tsang Ch'ing-yü, Director of the Imperial Stud.'

'12. *Stem Wine Cup* (*Pa Pei*) *of Hsüan-tê porcelain of the Ming Dynasty.*

'This cup, decorated with three fish in deep red, is moulded in the shape of one of the carved jade stem-cups of the Han Dynasty, of the same height and size as in the illustration. The colour of the glaze is as white as congealed fat, as pure as driven snow, and the three fish of deep red, boldly outlined by the brush, are as red as fresh blood, the brilliance of the precious colour penetrating the glaze and shining like polished glass so as to dazzle the eyes. It is truly a rare unrivalled specimen of this extremely choice variety of porcelain. The foot of the cup, which is level underneath, has engraved in the paste under the glaze the mark in six characters—*Ta Ming Hsüan tê nien chih*, "Made in the reign of Hsüan-tê of the Great Ming Dynasty." I purchased it for twenty-four taels at Shao-hsing Fu (in Chêkiang province) from the collection of Chu, a Supervising Censor.'

'13. *Miniature Bowl* (*Hsiao Chan*) *of Hsüan-tê porcelain of the Ming Dynasty.*

'This bowl, decorated like the last with three fish in deep red, is very small and shallow, but moulded of perfect shape. The glaze, white as driven snow, is marked like a chicken's skin with silky lines and millet-like tubercles, and the three red fish, although not larger than flies, have their scales and spines all marked, the colour, resembling that of red precious stones from the West, shining out most beautifully. It holds less than two ounces of wine, a quantity sufficient for a libation to the Great Spirit of the Taoists. I saw one of these cups in the house of a Shansi merchant, who told me

that he had bought it at a high price in Peking. After his departure it disappeared too, and I have never seen a sign of one since, so that there cannot be many of them left in the present day.'

'14. *Egg-shell Cup* (*T'o-t'ai Pei*) *of white porcelain of the reign of Yung-lo of the Ming Dynasty.*

'This cup, decorated with the dragon and phoenix under the glaze, is copied from I know not what source. It is of excellent form and good design, intended either for tea or wine. The fabric of the cup is very thin, of the thickness of paper, extremely clear and fine, and it is ornamented on the bowl with dragons and phoenixes most delicately carved. Below there is the mark in six characters—*Ta Ming Yung lo nien chih,* "Made in the reign of Yung-lo of the Great Ming Dynasty," very finely written. There are a few of these cups still left, yet they are rarely seen even in good collections. I have now drawn this picture only "to complete as it were the muster of the guards", and in order that any collector may have a pattern before him, so that, if he should happen to meet with a genuine example, he may not grudge a high price to add it to his collection. I beg any of my honourable successors who are fond of these things, and who may hear of these cups and yet not be able to see them, to glance instead at this catalague of mine, and not be unwilling to accept a word of instruction from me. I saw this one when at the Capital (Peking) at the Pao-kuo Temple.'

'15. *Palace Rice Bowl* (*Kung Wan*) *of the reign of Hsüan-tê of the Ming Dynasty.*

'This bowl, the form of which is very graceful, came out of the Imperial Palace. It is of the same height and diameter as in the figure. The glaze is as white as drifted snow, decorated with three fish of bright vermilion colour, with slightly raised elevations like granules of millet. It

is fit to make a most recherché gift, one can think of nothing but Shêng-chiang agate or precious amethyst to compare it with, and it is only the abode of an ascetic scholar that is worthy of it. I saw it at Peking at the house of Liang, one of the Chief Eunuchs of the Palace.'

'16. *Palace Dish* (*Kung Tieh*) *of the reign of Hsüan-tê of the Ming Dynasty.*

'The form of this dish is perfectly moulded, of the same height and diameter as in the picture. The colour of the glaze is redder than fresh blood, and the whole surface is decorated under the glaze with five-clawed dragons carved in the paste. The interior of the saucer, quite plain, is coated with a pure white enamel. Below the dish is the six character mark *Ta Ming Hsüan tê nien chih*, "Made in the reign of Hsüan-tê of the Great Ming Dynasty," beautifully engraved under the glaze. I saw this dish at the house of Chang Kuo-ch'i, who had purchased it for a large sum from a dealer in curios.'

'17. *Stem Wine Cup* (*Pa Pei*) *of the reign of Ch'êng-hua of the Ming Dynasty.*

'This cup, decorated with a grape-vine painted in enamel colours, is similar in shape to the one figured above (No. 12), but with a more expanded mouth. It is of the same height and size as in the illustration. The colour of the ground is a starchy white, the leafy tendrils of the vine are of the brightest green, and the bunches of grapes of the colour of amethysts hang down like strings of coloured glass beads. The painting is finely executed to a hair's breadth, and it is truly a rare gem. The surface is studded with millet-like granulations, and the antique colours are finished off in dark and light shades, so that it forms a choice piece of the porcelain manufacture of the reign of Hsien Tsung, and no one would grudge the high price paid for it. This wine-cup is in the collection of the Grand Historiographer Wang Sun-chi of

Chin-sha, who told me that he had bought it for sixty taels from the collection of Hsü, Sub-Prefect of Hsüan-ch'êng (Ning-kuo Fu in Kiangnan). The inscription written underneath the foot in blue under the glaze is *Ta Ming Ch'êng hua nien chih*, "Made in the reign of Ch'êng-hua of the Great Ming Dynasty".'

'18. *Two Wine Cups (Pei) of the reign of Ch'êng-hua of the Ming Dynasty.*

'These cups, painted in enamel colours with flowers and insects, are very small and beautifully thin. When held up to the light they show delicate spiral lines, the result of the revolution of the wheel. Each cup does not exceed a third of an ounce in weight, so that they are very light. The flowers and insects painted upon them are as tiny as the heads of flies or the feet of mosquitoes, and yet shaded in all the different colours of nature, so as to be instinct with life and movement. That so much labour should have been lavished upon tiny cups like these is a token of the excellence of the sacred rules of the reign of Hsien Tsung, not like the common, careless, and scamped way of working of outside potters. The value of a pair of these wine-cups may be estimated at a hundred taels of silver, but now one may get a hundred taels and yet not be able to get the cups. I saw them at Peking in the collection of General Huang.'

I may add to the above three illustrations taken from pieces in my own collection at Peking. The first (Fig. 19) is a tall pricket candlestick 27 inches high, from a temple altar set of five pieces (*wu kung*), consisting of the usual tripod incense-burner in the centre, a pair of trumpet-mouthed flower vases, and a pair of these candlesticks on either side. It is interesting as having been made by T'ang Ying, the most celebrated of the Directors of the Imperial Porcelain Manufactory at Ching-tê Chên, for a Taoist Temple at Tungpa, a place situated on the northern bank of the Canal, midway between Peking and

T'ungchou. It is decorated in blue with bands of formal scroll design and floral pattern, separated by stiff foliated borders. At the base the floral ground is interrupted on one side to form an oval panel, containing an inscription in seven vertical lines giving a full list of the titles and offices of the maker and the date, corresponding to A. D. 1741, two years before he described the twenty illustrations from the Imperial Library. The inscription reads:—'Reverentially made by T'ang Ying of Shên-yang, a Junior Secretary of the Imperial Household and Captain of the Banner promoted five honorary grades, Chief Superintendent of Works in the Palace Yang-hsin Tien[1], Imperial Commissioner in charge of the three Customs Stations of Huai, Su, and Hai[2], in the Province of Kiangnan, also Director of the Porcelain Manufactory, and Commissioner of Customs at Kiukiang, in the Province of Kiangsi: and presented by him to the Temple of the Holy Mother of the God of Heaven at Tungpa, to remain through everlasting time for offering sacrifice before the altar: on a fortunate day in the spring of the 6th year of the reign of the Emperor Ch'ien-lung.'

The second (Fig. 20) is a much more ancient piece, probably earlier in date than any of the specimens figured above. It comes from the collection of Liu Hsi-hai, styled Yen-t'ing, Lieutenant-Governor of the Province of Shantung, a famous antiquarian writer, author of several works on numismatics, and is authenticated by the seal of Yen-t'ing engraved upon the ebony stand. The other characters carved on the upper border of the stand are *Ju yao Kuan yin tsun*, 'Kuan-yin Vase of Ju-chou Porcelain', Kuan-yin being the Chinese title of the Buddhist divinity Avalôkitêshvara. The vase is 18 inches in height, 6 inches in diameter at its widest part. It is moulded of a light-coloured opaque paste of intense hardness. The glaze

[1] Situated in the south-west angle of the grounds of the Prohibited City at Peking, a favourite retreat of the Emperor Ch'ien-lung. The workshops of the Imperial Household are attached to this palace.

[2] Huai-an Fu, Su-chou, and Hai-chou.

of light sea-green tint, finely crackled on the surface, is very thick and translucent, but does not completely cover the vase, terminating towards the lower fourth in a wavy line, the aspect of which justifies the Chinese description of it as like melted lard. A few tears spread from this downwards over the lower part, which is otherwise quite bare. The upper half, horizontally fluted above, is covered with figures executed in strong relief. In the middle a ring of twelve standing figures, dressed in loose robes, with long drooping sleeves and cowls over their heads, encircle the vase, supported upon a plaited moulding. These appear to be Buddhist monks, and above them are three figures (not given in the illustration, being on the opposite side of the vase), the central one a seated image of Buddha with an attendant standing on either side. The rest of the ground above is sprinkled with flowers and spiral coils, which look like serpents, but may be intended to represent clouds, while the top of the vase is encircled by a dragon of antique design, facing the disk of the sun supported on a double spiral cloud.

The last illustration (Fig. 21) is taken from a vase also in my own possession, which came from the same collection of Liu Hsi-hai as the last. It is 13 inches high, decorated with scroll grounds and ornamental borders, lightly engraved in the fine paste, and covered with the ivory white creamy glaze characteristic of Ting-chou porcelain, the surface of which is lightly crackled. The stand has engraved upon it *Ting yao an hua fang p'ing t'u*, 'Illustration of a square vase with engraved decoration of Ting-chou porcelain.' This vase is referred like the last to the Sung Dynasty (A. D. 960–1279). It is evidently copied both in form and decoration from an old bronze design.

STEPHEN W. BUSHELL.

PEKING,
*May*, 1891.

# PREFACE

Scholars who are fond of antiquity have many books describing bells, tripods, and the various sacrificial vessels of ancient bronze, such as those by Tung Yu, Liu Ch'ang, and Hung Mai; and, in addition to these authors, the *Po ku t'u* of the Hsüan-ho period (A. D. 1119–25) contains a most complete collection. It is only on pottery that there is no special book. We have the *Ko ku yao lun* with a few fragmentary notes, but not enough to satisfy its readers.

The learned Chu T'ung-ch'uan of Hai-yen has just brought his *T'ao Shuo*, a 'Description of Pottery' in six books, for my inspection. His descriptions of modern porcelain, of ancient porcelain, and of particular specimens, follow in order without confusion, and each kind is carefully distinguished. There are the Kuan, Ko, Ting, and Ju classes of pottery made in different places. From the time of the Ming Dynasty downwards, however, it is only Ching-tê Chên in Jao-chou that has continued to be celebrated for its porcelain.

During the Ming Dynasty eunuchs were appointed in charge of the work, and they used wrongfully to require more than the amount fixed by the regulations, so that the workmen were not properly remunerated for their labour, and the people were unduly oppressed. Under the Reigning Dynasty, on the contrary, the proper government officials are carefully selected, and they give money according to the market price and even in excess, so that the people come joyfully, and there are several thousands working daily in the potteries. The producers have in this way become rich, they spare no labour, and do not grudge expense, so that the ware turned out is of novel design, and improved daily. Even when com-

pared with that of former dynasties, which used to be lauded as being as precious as gold or jade, there is some that excels, none that fails to come up to the old, and, if it be not now described, after generations will be unable to discuss it.

This work of T'ung-ch'uan may be classed as an official guide for the potter, and may even be ranked besides as a useful book on the history of the Reigning Dynasty. Our successors looking back to the present time may know from the porcelain produced the kind of government, so that it must not be deemed only a subject of research and discussion for scholars of artistic culture.

The above Preface is written by Ch'iu Yueh-hsiu of Hsin-chien.

# DESCRIPTION OF CHINESE PORCELAIN

## BOOK I.

### DESCRIPTION OF MODERN WARE.

#### 1. Jao-chou Porcelain of the Reigning Dynasty.

During the present Imperial Dynasty, in the eleventh year (A.D. 1654) of the reign of Shun-chih, the Emperor ordered a number of large fish-bowls decorated with dragons, and some balustrade slabs, to be made, but the result was unsuccessful, and he afterwards rescinded the order, fearing to oppress the people.

In the nineteenth year (A.D. 1680) of the reign of K'ang-hsi, the Emperor sent an official of the Nei-wu-fu (Imperial Household) to reside at the imperial manufactory and superintend the work. Previously to this the first-class workmen had been levied from the different districts of Jao-chou, but now all this was stopped, and as each manufactory was started, the artisans were collected and the materials provided, the expenses being defrayed from the imperial exchequer and the money paid when due, in accordance with the market prices. Even the expenses for carriage were not required from the different districts. None of the proper duties of the local officers were interfered with; both the officials and the common people enjoyed the benefit, and the processes of manufacture were all much improved.

During these latter years the ancient sacrificial and ritual vessels, the *tsun*, *lei*, *yi*, *ting*, *yu* and *chüo*,[1] have all been reproduced in porcelain.

[1] These are all copied from ancient bronze forms, and examples of all but the *yi* may be found figured in Pauthier's *Chine*, referred

For the library of the scholar there are provided the pallet, the ink-rest, and the water-pot; scroll picture mounts, bookstands, and paper-weights; each adapted for its appropriate use. For the hair-pencil of Chung-shan there is made first the handle, then the bath, a bed for it to lie upon, a frame to hold it, and a cylinder vase for it to stand up in. There are copies of the double-stroked carved jade-seals of the Han Dynasty, with handles fashioned like camels, tortoises, dragons, or tigers, like linked rings, or tiles; besides boxes for the seal colour, square, round, or many-sided. All these things are designed for the use of the clever writer.

For holding flowers there are vases varying in height from two or three inches up to five and six feet, fashioned round like '*hu*,' round, and with swelling body like the gall-bladder, called '*tan*,' round, with expanded mouth and contracted body, like '*ṭsun*,' with flat sides and angles in relief, like '*ku*'; some cylindrical like a joint of bamboo, others square like a corn measure; sometimes with contracted mouths or flattened laterally, otherwise with square or round flutings; others again as it were cut in halves with the back flattened so as to hang against the wall. There are all these diverse shapes.

There are plaques decorated with writing and painting for mounting as screens, slabs for pillows and for inlaying bedsteads, handles for walking-sticks, round bowls like Buddhist alms-bowls, with the black and white men to fill them with, and other apparatus for chess or gobang.

Vessels are made for burning incense, censers (*lu*) plaited in a hundred folds or divided by partitions, with ears in the form of eels, of ropes, or of halberds, some six-sided, others square, with straight legs, or mounted upon pomegranates. Some are designed in the form of

to above. The *tsun* are wine-vessels of varied form, the *lei* vases ornamented with clouds and 'thunder' scrolls, the *yi* (Fig. 4) bowl-shaped vessels without feet, the *ting* like caldrons with three or four feet (Fig. 3) and two handles, the *yu* wine-jars with covers and large loop handles for suspension, the *chüo* libation cups.

oranges, or of silk bags. They are coloured wax-yellow, tea-green, gold-brown, or the tint of old Lama books, a solace to the eyes in moments of leisure.

For daily use there are turned out rice-spoons, tea-spoons, and sets of chopsticks, candle-snuff receptacles and vinegar-pots, washing-basins, oil lamps and pricket candlesticks, pillows both square and round, flower-pots and saucers, round jars with small mouths (*wêng*), with large mouths (*po*), plates and bowls of all kinds.

For the adornment of beauty in the inner apartments there are provided ornamental head-scratches, hair-pins, and ear-rings, as well as covered boxes, large and small, to hold fragrant scents and cosmetics.

Finally, for tea meetings, for wine parties, and for dinner services, there are made teapots and wine-vessels, bowls and dishes of the most varied form and design, too many to enumerate.

For models of form, good examples are chosen from the Ting-chou and Ju-chou, the Kuan (Imperial) and the Ko potteries of the Sung Dynasty, from the porcelain of the reigns of Hsüan-tê, Ch'êng-hua, and Chia-ching (of the Ming Dynasty), and from *Fo-lang* ware,[1] all collected in the same manufactory.

The colours produced include deep red (*chi hung*),[2] the

[1] *Fo-lang* here means cloisonné enamels on copper, also written *fa-lang* and *fa-lan*. It seems to be a corruption of *Fo-lin*, the old Chinese name of Byzantium, from which place the art appears to have been introduced into China, perhaps by means of the Arabs, as it used also to be known as *Ta-shih yao*, 'Arab ware.' It flourished most in China in the reign of Ching-t'ai (1450–56), and is still often called on that account *Ching-t'ai lan*. Peking has always been the place of its production, and it is described in the *Ko ku yao lun* as already established there early in the fifteenth century by Mohammedan natives of the province of Yunnan, and known then as *Kuei-kuo yao*, 'Ware of the Devils' country.'

[2] This red is due to a silicate of copper, the base of the *sang de bœuf*, 'peach-bloom,' and other monochrome glazes so highly appreciated by collectors. The word *chi* is written in different ways in Chinese, but the original form meant 'sacrificial', and referred to the colour of the wine-vessels used by the Emperor Hsüan-tê for sacrificing upon the Altar of Heaven.

red of sulphate of iron (*fan-hung*), deep blue (*chi-ch'ing*), light blue (*fên-ch'ing*), céladon or sea-green (*tung-ch'ing*), crimson (*tzŭ*), green (*lü*), gold (*chin*), silver (*yin*), and lac-black (*ch'i hei*), these different colours being used in their turn for decoration.

The forms of the pieces are most varied; there are vases round, square, polygonal, and cut down; some are tall, some short; some with wide-spreading mouths, others contracted; some plain, others painted in colours; some with embossed moulded decoration, others engraved. Others, again, are moulded in the shape of single and double gourds, flowers and fruit, and animal forms.

The decorative designs include landscapes, scenes with figures, pictures of flowers and birds, &c., freely sketched in outline with the pencil-brush and filled in with blues and greens of different shades. Also near and distant views for each of the four seasons copied from pictures of celebrated artists.

In fact, among all the works of art in carved gold, embossed silver, chiselled stone, lacquer, mother-of-pearl, bamboo and wood, gourd and shell, there is not one that is not now produced in porcelain, a perfect copy of the original piece. In these days each separate branch of art work, as that executed in jade by Lu Tzŭ-kang, in gold by Lu Ai-shan, in silver by Chu Pi-shan, in rhinoceros horn by Pao T'ien-ch'êng, in tin by Chao Liang-pi, in carnelian by Wang Hsiao-hsi, in copper by Chiang Pao-yun, in carved bamboo by P'u Chung-ch'ien, in mother-of-pearl by Chiang Ch'ien-li, and in Japanese lacquer by Yang Hsün, is merged in the one work of porcelain. This reveals the secrets of physics, and supplements the learned researches of scholars, so that since the invention of pottery, no period has approached in any degree to the present. There is nothing to distract the minds of the workers, their labour is free and untaxed, and the earth yields its natural products in increasing abundance, as the imperial rule waxes stronger, according to the logical sequence of events.

## 2. Description of the Twenty Illustrations of the Manufacture of Porcelain.

*By T'ang Ying, Director of the Imperial Factory at Ching-tê Chên.*

'In the fifth month of the eighth year (A. D. 1743) of the reign of the Emperor Ch'ien-lung, I, T'ang Ying,[1] Junior Secretary of the Imperial Household, Chief Commissioner of Customs at Kiukiang, in obedience to an Imperial edict, having received twenty illustrations of the manufacture of pottery from the Imperial Palace to arrange in order and explain, have written this Description of the Illustrations, to be reverently submitted to the Imperial glance. Carefully following the original pictures, I have composed a general description and written it after each one, to serve, as it were, as a lens, with which to see the excellence of the porcelain of the period.'

'Illustration No. 1, called:—*Collection of the Stones and Fabrication of the Paste.*

'The stones are found in the province of Kiangnan, in the department of Ch'i-mên in Hui-chou, on the mountains P'ing-li and K'u-k'ou, at a distance of two hundred *li* from the Porcelain manufactory. Mines are excavated to dig out the stones, which when broken exhibit internally black markings branching like the deer's-horn seaweed. The natives take advantage of the streams flowing down the mountain side to erect wheels provided with crushers. The stones are finely powdered, washed clean, and made up in the shape of clay bricks, which are called *pai* (white) *tun*.' [*Author's Note.*—Read *tun* in the third tone. All

[1] T'ang Ying was appointed in the sixth year of the Emperor Yung-chêng (A. D. 1728), Joint-Director with Nien Hsi-yao, of the Imperial Porcelain Factory. In the reign of Ch'ien-lung he was appointed Superintendent of Customs, but continued in charge of the porcelain manufacture, and became celebrated for the novelty of his inventions as well as for his clever imitations of antiques. A full list of the offices he held in the year 1743 is contained in the inscription on the pricket candlestick figured here (Fig. 19).

the different kinds of earth used in the fabrication of porcelain paste are included in this name, which is taken from the local dialect of Ching-tê Chên.] 'Those of pure colour and fine texture are used in the manufacture of bowls and vases of egg-shell (*t'o t'ai*), pure white (*t'ien-pai*), and blue and white porcelain. Besides this there are several other kinds of earth called *kao-ling*, *yü-hung*, and *chien-t'an*, all produced within the limits of Jao-chou. These are collected and prepared in the same way as the *pai-tun*. They are only used for mixing with the first named, or in the fabrication of coarser porcelain ware.'

We find that in Jao-chou the porcelain earth was first obtained within the department of Fou-liang, at Hsin-chêng-tu on the Ma-ts'ang mountains. In the reign of Wan-li (A. D. 1573–1619) the supply of Ma-ts'ang earth was exhausted, and it was then brought from Wu-mên-t'o in the same department. So Ch'i-mên was the third locality to supply it in its turn.

The *K'ao kung chi*, referring to the manufacture of the five material elements, says that clay was first stiffened (*ning*) to make vessels. This is explained to mean strengthened, as the clay had to be strengthened before it could be made into vessels. The fabrication of the clay is there called *po chih*, *po* meaning striking or throwing, *chih* ductile clay. The preparation of the *pai-tun* is thus the first step in the working of the ductile clay.

'No. 2, called:—*Washing and Purification of the Paste.*

'The method of washing and purifying the earth is to mix it with water in a large earthenware jar, and to stir the mixture with a wooden prong, till all the impurities have floated to the surface. It is next passed through a fine horse-hair sieve and then into a bag made of two thicknesses of silk. It is afterwards poured into several earthenware vessels, so that the water may run off and the paste be solidified. Wooden boxes with no bottom are used, and placed on piles composed of several tiers of new bricks, covered with a large cloth of fine cotton,

upon which the solidified paste is poured, wrapped round with the cloth, and pressed with more bricks so that all the water may be absorbed. When freed from water the prepared paste is thrown on to large stone slabs, and turned over with iron spades till it be quite ductile and fit for the manufacture of porcelain. All the different kinds of paste are prepared in this way, the various materials being mixed in definite proportions according to the proper use of each.'

The character 陶, *t'ao, pottery*, is compounded of two parts 阜, *fu*, hillock, and 匋, *t'ao* or *yao, pottery*, which is the same as 窯, *yao, kiln*. The character 淘, *t'ao*, to wash clay, is a compound of the same *t'ao* with radical *shui*, water, the first work in the manufacture of pottery being to wash the clay, the addition of water making it ductile. The porcelain made during the Sung Dynasty at Hsiu Nui Ssŭ (the Imperial manufactory, at Hangchou) is described as having had the paste carefully washed and thoroughly purified, *têng* the character used being synonymous with *t'ao*. So the *Ko ku yao lun*, describing Ting-chou porcelain, says that 'the texture of the paste is fine white and of rich brilliance'; and describing Ju-chou porcelain, that 'the texture of the paste is rich and brilliant.' The *Jung ch'a li shuo* says that 'the body of the porcelain is brown or white according to the materials used, and that the composition of the paste is a more important duty than the processes of washing, firing, or painting.' The work of washing and purification of the paste is thus most important.

'No. 3, called:—*Burning the Ashes and Preparing the Glaze.*

'The glaze cannot be made without ashes. The ashes for the glaze come from the department of Lo-p'ing, distant 140 *li* southwards from Ching-tê Chên. They are made by burning a grey-coloured limestone with phoenix-tail plants (ferns). The residue is washed

thoroughly with water, fine *pai-tun* earth is added, and mixed with it so as to make a paste, in greater or less proportion according to the kind of porcelain. The mixture is put into a large jar. A curved wooden stick is passed through the ears of a little iron pot to pour the materials more easily, forming the measure called *p'ên*. The best glaze is made of 10 measures of paste and 1 measure of ashes, medium glazes of 7 or 8 measures of paste and 2 or 3 of ashes, while inferior glazes are made of equal parts of each or with ashes in excess.'

We find that former writers on porcelain say that the colour of the glaze is brilliant and transparent, or that the liquid glaze is pure and clear, and that, when the glaze is wanting, they use the term *body* (lit. *bones*). The character employed 油, *yu*, is synonymous with the modern 釉, *yu*, and was read in the fourth tone. Subsequent makers of characters have made other distinctions. The *Su shu k'an wu*, says: 'The lac-like brilliance of porcelain is called 光油, *yu*, also written 釉. It does not refer to the ancient 油, *yu*, but adds 光, *kuang*, *brilliant*, to make a new character, which may also be written without the radical to avoid confusion of strokes. When written with 由, *yu*, as phonetic and 采, *ts'ai*, radical, as above, it conveys the idea of brilliance, and is in accordance with the orthodox six rules of writing. The dictionary *Chêng tzŭ t'ung* includes yet another 淪, *yu*, defining it as a vulgar term for the bright-coloured glaze of porcelain: this was originally the name of a lake in the K'un-lun mountains borrowed to convey the idea. The Official Records write another character 碞, *yu*, which formerly did not exist, and is probably a vulgar change. The character has passed through so many variations that it is impossible to fix it. Judging from ancient form 油 is more correct, but in common usage 釉 is more frequent. This last is most fitting because its radical has the meaning of brilliance,

while the first conveys the idea in itself. The two other characters fail in this. That with *kuang* as radical is too complicated. I follow T'ang Ying in his *Description of the Illustrations*, in writing 釉, *yu*, and shall always use this character in subsequent parts of my work, changing to it for the sake of uniformity, whenever the authors quoted write differently.

'No. 4, called:—*Manufacture of the Cases* (*Seggars*).

'The unbaked porcelain must be kept clean, as a single spot of dirt or impurity is enough to stain or break it. Besides, the fierce blast of air and flame in the furnace would injure the soft paste. For these reasons it is necessary to use seggars. The clay of which these seggars are made comes from the village of Li-ch'un, situated to the north-east of Ching-tê Chên. It is of three different colours, black, white, and red. A kind of blackish-yellow sand, which is found at Pao-shih-shan, is made into a paste with the clay, and the seggars are baked in the kiln. They are fashioned on the wheel in the same way as the porcelain. The work need not be too finely finished, and they are partially dried to fit them to be roughly shaped with the knife. They are first put empty into the kiln and baked, which is called 'preparing the seggars.' The seggar-makers often also use this same clay to make common earthenware bowls, for the daily use of the workmen at the potteries in their native hamlets.'

We find in the ancient official regulations that there used to be six kinds of furnace, in which the seggar furnace was counted as one, and twenty-three branches of work, one of which was the manufacture of the seggars. Fire is fierce, earth soft, and the seggars are intended to protect the unbaked porcelain, hence they will repay the trouble of being carefully made. In casting copper the model is first made of wax, and the inscription engraved upon it, and it is then put inside a wooden barrel, into which a mixture of prepared clay is poured

daily, being repeated as soon as it be sufficiently dried till thick enough to protect the wax core. Finally, the staves of the barrel having been taken away, the molten copper is poured in through a hole left for the purpose. The material is not the same, yet the effect is similar. Earth before it has been fired is soft, and, unprotected, it could not withstand the fire: copper when taken out of the fire is fluid, and, if not protected, could not be moulded. The crooked processes of manufacture of all things come under the same creative laws.

'No. 5, called:—*Preparing the Moulds for the Round Ware.*

'In the manufacture of the round ware, each several form has to be repeated thousands or hundreds of times, and without moulds it would be most difficult to make the pieces all alike. The moulds must be made after the pattern required, but the size cannot be exactly measured, because the paste, which before firing is expanded and loose in texture, contracts and solidifies during the process till it be only seven- or eight-tenths of its original volume. This follows from the natural laws of physics. The proper proportionate size of the unbaked porcelain depends upon that of the moulds, therefore the moulders use the term *fix*, not that of *make*. If each mould be not repaired constantly, the size and form of the pieces as they are taken out will certainly vary indefinitely. A good practised knowledge both of the length of firing and of the nature of the paste is required, before it be possible to estimate the amount of decrease in size, so as to fix the proper form of the moulds. Only three or four of the workmen throughout the whole district are reckoned really clever hands.'

Referring to the *K'ao chung chi* we find that in the description of pottery manufacture it says—'The vase is fashioned by turning, the tazza-dish (*tou*) made with the plumb-line.' Chêng in his *Commentary* explains that 'turning' signifies turning on the potter's wheel, on which the vessel was fashioned as it revolved, a pattern being

placed near to estimate the size of the vase: and that the 'plumb-line' was suspended so that the foot or stem of the dish might be made upright. In modern times moulds are used and the pieces finished in the same way as of old. The same book in the opening chapter describes how the State included six classes, of which the hundred artisans formed one class, and that they examined the shape, form, and quality, before working the five primary materials: and how the King and his nobles sat in council and the officers put the rules into practice. Chêng Ssŭ-nung explains that they examined the five materials, to take advantage of the curved, straight, and other qualities of each one to work them. This was an important duty and not easy of execution.

'No. 6, called:—*Fashioning the Round Ware on the Wheel.*

'Porcelain is made in more than one form. Square, polygonal, ribbed, and angular pieces are worked into shape by joining, by chiselling, by moulding, and by carving; while the round pieces have the paste turned on the potter's wheel. The round dishes, bowls, cups, and plates are divided among two classes of workmen, one of which takes the large pieces of one to three feet in diameter, the other the small pieces measuring less than a foot across. The wheel, which is like a round wooden table, is fixed so as to turn upon a perpendicular axle, and revolves continuously for a long time, so that the paste is turned properly without becoming too thick, too thin, flattened or misshapen. There is a carpenter at hand to repair it when necessary. There are also workmen to knead the paste to a uniform consistence and put it on the table. The turner sits upon the border of the apparatus and turns the wheel with a bamboo staff. After the wheel has been set in motion he moulds the paste with his hands, and according to the rapidity of the motion of the wheel, and the heavy or light pressure of the hands, the round ware is fashioned into shape.'

We find in the *T'ung ya* that the ancient *yü*, the Sung Dynasty *yü*, the four-fold *lo*, and the six-fold *lo*, were different ancient designs of the bowls and plates of Ching-tê Chên. From this it follows that the pieces were not all made of the same form, although things of similar form must all follow one design. There was the mould to fix the size and shape, and the wheel to fashion the pieces all alike. The processes of manufacture were already so perfect. Wang Ch'ung says in the *Lun hêng*:—'The potters make the moulds of clay. The pieces must be moulded neither too large nor too small, as it is impossible to correct them afterwards. Therefore the necessary measurements must be made before they are baked to ensure success.' The moulds (*kuei-lien*) referred to here were those used in the Han Dynasty (202 B.C.–A.D. 220) in the manufacture of pottery. There are definite rules for every kind of handicraft. The *T'ung su wên* says that 'an earthen mould is called *hsing*, a metal mould *jung*, a wooden mould *mu*, a bamboo mould *fan*.'

'No. 7, called:—'*Fabrication of the Vases* (*Cho ch'i*).

'The different vases and wine-vessels called *p'ing*, *lei*, *tsun*, and *yi*, are comprised in the general name of *cho ch'i*.' When round, they are like the ordinary small round pieces, first fashioned on the wheel, then dried, and once more put on the wheel to be cut round with the knife. After the vase has been thus shaped it is polished till quite smooth with a large goat's-hair brush dipped in water, till the surface is perfectly bright and clean. Afterwards the glaze is blown on, it is baked in the furnace and comes out as a piece of white ware. If painted blue before being covered with glaze it comes out decorated in blue. The polygonal, square, ribbed and angular pieces have the paste wrapped up in cotton and pressed with boards into slabs, which are cut with the knife into sections, cemented together with some of the original paste mixed with water (*barbotine*). Another kind, in which the paste is moulded, is finished off after

it has been taken out of its mould, in the same way as the square vases made in sections. Both these varieties of cemented and moulded vases, after they have been washed, cemented, polished, and washed clean, like the round vases, may finally be engraved or carved in open-work, for which purpose, when sufficiently dried, they are handed to the artificers who are specially devoted to these branches of work.'

We find that the *Shih wu kan chu* says:—'In the manufacture of porcelain the square pieces are the most difficult. Why are the square so difficult? Because after having been baked they often come out misshapen or fractured and rarely quite perfect. When the paste is first worked the borders must be cut straight, the hollow parts must be scooped out, and the segments must be solidly cemented together. In some small unseen place there often results a loss of continuity or irregularity, either above or below, in front or behind, to the left or right. This is why the square are said to be difficult. The round pieces are fashioned at one stroke, following the pressure of the hand, the wheel doing more than half of the man's work, while the square and many-sided pieces depend wholly, on the contrary, upon the manual skill of the workman.' Moulds are employed to press the moulded pieces. During the T'ang Dynasty, when Wan T'o had audience of the Emperor Kao Tsung (A.D. 650–683), it was rumoured among the people that he was a moulder of cups. A round hut was also called *ou-t'o* because it was like a cup-mould in shape, *t'o* being the mould used to make cups. In addition to all these kinds there are also embossed pieces and engraved pieces. In embossed porcelain, white paste is attached to the pieces and worked in relief into the desired shape with the brush. In engraved porcelain, the design is cut upon the pieces before baking, with the graving tool. The branches of embossing and of engraving have each their special workmen.

'No. 8, called:—*Collection of the Blue Colour.*

'Porcelain painted in blue and white, and also that decorated with the deep blue monochrome glaze, both require this blue. It is obtained from the province of Chêkiang, being found on several mountains within the two prefectures of Shao-hsing and Chin-hua. The collectors who go into the mountains after the colour wash away the adherent earth in the water of the streams. It is dark yellow in colour. The large and round pieces which furnish the best blue are called *ting yuan-tzŭ* ("best rounds"). After it has been brought to the potteries it is buried under the floor of the furnace for three days, then taken out and again carefully washed, after which it is offered for sale. That obtained from the mountains of the two provinces of Kiangsi and Kuangtung is thin in colour and unable to support the fire, so that it is only fit for the decoration of coarse pieces.'

We find that during the Chin Dynasty (A.D. 265–419) the name of silk blue-green porcelain (*p'iao tz'ŭ*) was used, during the T'ang Dynasty (618–906) 'green of the thousand peaks,' by the Ch'ai Chou Dynasty (951–960) 'blue of the sky after rain,' under the house of Wu and Yueh (tenth century) 'secret (prohibited) colour' (*pi-sê*). The succeeding dynasty of Sung (960–1279) made porcelain of many colours, among which the *Ju* porcelain of the Sung was of pale green colour, the *Kuan* (Imperial) porcelain of light bluish colour was the kind most highly valued, while the *Ko* porcelain and *Lung-ch'üan* porcelain were both green. Blue and green (*Ch'ing*) are the colours which rank first for the decoration of porcelain. Painting in blue on a white ground also requires the same blue material. Under the Ming Dynasty, in the reign of *Hsüan-tê* (A.D. 1426–35), *Su-ni-p'o*[1] blue was used, in the

[1] The blue is called *Su-ma-li* blue, and *Su-ma-ni* blue, in other books of the same period. It is uncertain whether it be the name of a country or of the material. In the Annals of the Sung Dynasty, Bk. 490, p. 12, the Arabs are described as bringing to China in the

reign of *Chia-ching* (1522–66), Mohammedan (*Hui*) blue. This blue was not of inferior value, but the place of production was too remote, so that the supply afterwards failed. Pilfering on the part of the workmen was also found difficult to prevent.

'No. 9, called:—*Selection of the Blue Material.*

'For the selection of the blue there is a special class of workmen, whose sole duty it is to attend to this. The best is dark green, of a deep rich and perfectly uniform colour, and this is used in the imitation of antiques, for the deep blue monochrome glaze, and for the painting in blue and white of fine pieces. When of the same dark green colour but wanting in richness and lustre, it is only available for the decoration of coarser porcelain. The remainder that has neither lustre nor colour is picked out and thrown away. The method of using the blue is to paint it on the unbaked ware, cover it with liquid glaze, and then put the piece into the furnace. By baking it becomes uniformly transformed into a brilliant blue. If uncovered with glaze the colour remains black. Should the firing be too prolonged the blue "runs" widely over the white ground. There is one kind of blue called "onion sprouts" which makes very clearly defined strokes and does not "run" in the fire and this must be used for the most delicate pieces.'

We find that in the Ming Dynasty, when they used the Mohammedan blue, they first pounded the material. When broken with the hammer the best exhibited vermilion spots, that with silver stars being ranked next. These made up some two-tenths of the whole bulk. The smaller fragments and powder, when rubbed down with water and washed clean, yielded a further small fraction of about one-twentieth. If the blue be not very carefully selected, the porcelain will come out of inferior colour, therefore this work is entrusted to a special class of workmen.

tenth century, among other presents for the Emperor, pieces of *Wu-ming-yi*, cobalt blue, which has long been in use in Western Asia in the decoration of faience tiles, &c.

'No. 10, called:—*Moulding the Paste and Grinding the Colours.*

'After the paste has been fashioned on the wheel and fixed by being dried, it is put into the finishing mould and pressed down gently with the hand until regular in shape and uniform in thickness. It is then taken out and dried in the shade, so as to be ready to be finally shaped with the knife. The colours employed in the decoration of porcelain must be ground perfectly fine. If coarse, there will appear spots (thorns) of bad colour. Ten ounces of the material are put into each mortar, and ground by special workmen in the mortars for a whole month before being fit to be used. The mortars employed for grinding are placed upon low benches. To the benches are fixed upright wooden poles, which support the horizontal pieces of wood pierced to hold the handles of the pestles. The men seated on the bench hold the pestles and keep revolving them. Their monthly wage is only three mace of silver. Some of the men work two pestles simultaneously. Those who keep working till midnight are paid double. The aged and very young, the lame and sick, get a living by this work.'

The preparation of the colours used in painting porcelain differs from that of those used by artists. Porcelain colours must pass through the furnace to be fixed by fire. They are combined in accordance with prescriptions tested by former workmen, which must not be varied in the smallest fraction. They must also be ground perfectly fine and intimately mixed. Then only will the colour penetrate the body and shine out on the surface. Of ancient porcelain painted in colours that of the reign of Ch'êng-hua (1465–87) ranks highest, the painting being instinct with life, and sometimes even excelling the work of artists in ordinary water colours. Not only is the artistic work superior but the colours also are more perfect. In modern times we have the class of foreign colours (*yang ts'ai*) in addition, in which the work is

highly elaborate and dazzling to the eyes. Copies of animal life, imitations of ancient bronze sacrificial vessels, of black-wood and bamboo carvings, and of mother-of-pearl, all these are skilfully turned out exactly like the originals, the designs and colours clearly reproduced, so as to be recognized at a glance.

'No. 11, called:—*Painting the Round Ware in Blue.*

'The different kinds of round ware painted in blue are each numbered by hundreds and thousands, and if the painted decoration be not exactly alike, the service will be neither regular nor uniform. For this reason the men who sketch the outlines learn how to design, not how to paint in colours, while those who fill in the colours are taught colouring not designing, by which means the hand becomes skilful in the one art-work and the mind is not distracted. The designers and painters although distinct occupy the same house to secure uniformity in their work. The rings round the borders of the pieces and the blue bands are entrusted to the worker who finishes the parts on the polishing-wheel; the seals, marks, and written inscriptions, are the handiwork of the skilled writer. In the reproduction of living things it is necessary first to copy nature, in the imitation of antiques seeing many objects gives skill. Hereby blue and white decoration is distinguished from painting in colours.'

We find in the *K'ao kung chi* five branches of work in colour, called *hua*, *hui*, *chung*, *k'uang* and *huang*. *Chung* was to dye feathers, *huang* to dye silk, *k'uang* being left unexplained. The first two branches, *hua*, *hui*, taken together are used to comprise the art of painting generally. Chia Kung-yen says in his *Commentary* that the two were entrusted to different officers who worked together. The two branches could not be separated, *hua* meaning to design, *hui* to colour. So this division of the work into two branches occupying the same place is like the ancient division of the officers entrusted with similar work.

'No. 12, called:—*Fabrication and Decoration of Vases* (*Cho ch'i*).

'These vases are modelled after different forms, either square, round, polygonal or with prominent angles. They are fashioned and decorated also in various ways, with coloured glazes and painting, engraved or carved in open-work. . In the imitation of antiquity artistic examples must be copied, in the invention of new designs there is an inexhaustible source. In the reproduction of natural objects the exact form must be copied, the piece carefully moulded and painted in colours.'

We find that the ornamentation in relief of ancient sacrificial vessels was called 'hill-decoration', the engraved carving 'leaf-decoration'; also that bronze dishes were ornamented with cloud-forms and scrolls, and that there were marks and inscriptions as early as the Three Ancient Dynasties. In the 'Annals of the Han Dynasty' we are told, in the biography of Kung Yü, that his cups and bowls were carved and decorated with gold and silver, so that articles in daily use were already beautifully finished. Porcelain painted in colours excelled in the Ming Dynasty, the majority of the patterns being derived from embroidery and brocaded satins, three or four only out of each ten being from nature or copies of antiques. In modern porcelain, out of ten designs, you will get four of foreign colouring, three taken from nature, two copies of antiques, one from embroidery or satin brocade. In my humble opinion the 'Illustrations of the Three Rituals' (*San li t'u*), the *Po ku t'u* 'Collection of Bronzes', and the *Ku yü t'u* 'Collection of Ancient Jade', contain such a complete selection of designs, while the work of Hsüeh Shang-kung[1] comprehends a full series of inscribed bells and tripod urns, so that imitators of antiquity with the help of these books ought to surpass the *Ting*, *Ju*, *Kuan*, and *Ko* porcelain of the Sung Dynasty, and produce things of equal excellence with the ancient wine-vessels and sacrificial dishes.

[1] *Li tai chung ting kuan chih*, Bibliography, No. 51.

'No. 13, called:—*Dipping into the Glaze and Blowing on the Glaze.*

'The round ware and moulded vases painted in blue, as well as imitations of ancient pieces of *Kuan*, *Ko*, *Ting* and *Ju* porcelain, must all be covered with glaze before being put into the furnace. The ancient method of applying the glaze was to cover the vase, whether square, tall, lobed, or ribbed, with a goat's-hair brush filled with liquid glaze, but it could hardly be evenly distributed. The large and small round ware, and the round vases which were turned in one piece, were dipped into the large jar which held the glaze, but they became either too thinly or too thickly covered, and, besides, so many were broken that it was difficult to produce perfect specimens. In the present day the small round pieces are still dipped into the large jar filled with glaze, but the vases and the larger round vessels are glazed by blowing. A bamboo tube is cut one inch thick and some seven inches long, and the mouth is covered with fine gauze, which is dipped into the glaze, and then it is blown through from the other end. The number of times that this process has to be repeated depends on the size of the piece, and on the kind of glaze, varying from a maximum of seventeen to a minimum of three or four.'

We find in the *Jung ch'a li shuo* the process of glazing porcelain described, the glaze being called *wo-tsê*. 'In the *Ting-chou* porcelain it was rich and glossy, in the *Ju-chou* porcelain as thick as massed lard, in the *Kuan* or Imperial porcelain of the Sung Dynasty, clear and transparent. In ancient pieces the glaze is very thick, probably because, being dipped into the glaze, it could not be covered completely without several immersions. Hence this great thickness and transparency of the glaze. Former authors often allude to "palm spots" (*tsung yen*) and "crab's-claw marks" (*hsieh chao*) as distinctive points characteristic of ancient pieces. In reality these marks are due to small defects in the surface of the glaze.' The

method of blowing on the glaze is an excellent and ready process and supplies a deficiency in the old work. The *Po wu yao lan* describes a variety of porcelain baked a second time. 'The piece of old *Kuan* or *Ko* porcelain, such as an incense urn that has lost an ear or a foot, or a vase with broken lip, has the portion wanting patched with a piece of old porcelain, re-covered with glaze material, and is again put into the kiln. It comes out of the same form as before, but the part supplied is opaque in colour. Yet to a collector it is preferable to a new piece.' I venture to suggest that with the modern process of blowing on the glaze an old piece might be patched so successfully that the mended place would be imperceptible.

'No. 14, called:—*Turning the Unbaked Ware and Hollowing out the Foot.*[1]

'The size of the round ware is fixed in the mould, but to be polished smoothly it is given to the cutter, this process of polishing being a special branch of work. A wheel is used like the ordinary potter's wheel, but furnished with a wooden mandril in the centre, the size of which is proportional to that of the ware. This has a round head, which is wrapped round with raw silk, to protect the interior of the piece from injury. When ready to be turned the piece is put upon the mandril, the wheel is put in motion, and it is pared round with the knife, till polished quite smooth both inside and out. The coarse or fine finish depends upon the good or bad work of the cutter, so that this work of turning is of great importance. With regard to the excavation of the foot, each piece, when first fashioned upon the wheel, has a paste handle left under the foot, from two to three inches long, to hold it by while it is being painted and glazed. When all this has been done, the handle is removed, the foot hollowed out, and the mark written underneath.'

[1] The term 'foot' (*tsu*) is applied technically to the circular rim round the bottom of the piece, which is usually left unglazed, so that it shows the quality of the paste.

We find that this process of turning is the final operation of the potter, and with this the unbaked piece is finished. In ancient manufacture the foot supporting the piece was made very solid and heavy. *Ch'ai* porcelain had the foot generally of coarse yellow clay. *Kuan, Ko* and *Lung-ch'üan* porcelain all had iron-coloured feet. Coming to the Ming Dynasty, the cups of *Yung-lo* porcelain made to rest on the hand had feet of sand and only the centre glazed; the altar cups of *Hsüan-tê* porcelain had a convex bottom and thread-like feet; while the shallow wine-cups decorated with fish of *Chia-ching* porcelain were loaf-shaped inside and had round feet. These changes resulted from a gradual improvement in manufacture. The state of the foot of the piece of porcelain after it has been baked is an index of the process of firing.

'No. 15, called:—*Putting the Finished Ware into the Kiln.*

'The kiln is made long and round and resembles in shape a large water-jar (*wêng*) turned on its side. It is some ten feet in height and breadth, more than twice as much in length. It is covered with a tiled roof like a house, and this building is called the kiln-shed. Behind this is built the chimney, which rises to a height of twenty feet outside the kiln-shed. The ware when finished is packed in the seggars, and given to the workmen, who put it into the kiln. They place the seggars in lines, leaving a small interspace for the passage of the flames. The fire is distinguished as front, middle, and back, the front fire being fierce, the middle less intense, and the back fire gentle. According to the character of the different kinds of porcelain their place is arranged in the furnace. After it has been charged, the fire is lighted and the entrance of the kiln bricked up, a square hole being left, through which billets of fir-wood are thrown in without intermission. When the seggars have attained a silvery red colour (white heat) the firing is stopped, and

after the lapse of another twenty-four hours the kiln is opened.'

When the porcelain has been put into the kiln there is made at first a gentle fire, which is gradually increased so that the ware may become accustomed to the heat. Later the fire is kept high, in order that the heated ware may not get cool. In blast furnaces the proper regulation of the fire is a difficult task. The *T'ung chih* describes the fabrication of the paste and the painting of the decoration as the first processes, putting into the kiln and regulating the firing as the last.

'No. 16, called:—*Opening the Kiln when the Ware is Baked.*

'From the time of putting in to that of taking out of the kiln it takes generally three days, and early on the fourth day the furnace is opened. The seggars are still of a dull red colour and it is impossible to enter yet. After the furnace has been open some time the workmen, with their hands protected by gloves made of over ten folds of cotton soaked in cold water, and their heads, shoulders, and backs, wrapped round with damp cloths, go into the kiln to take out the contents. When the porcelain has all been removed, and while the kiln is still hot, the new charge of ware is arranged in its place, in order that being damp it may be dried by the heat, and be less liable to be broken into pieces or cracked by the fire.'

The success or failure of the baking is apparent when the furnace is thrown open. So the Official Records prescribe that the pieces of porcelain, before they are put into the kiln, must be carefully inspected, to see the good or bad condition of the material, then shut up in the seggars, which are strongly sealed, and finally fired. The smaller pieces with painted decoration must also be minutely examined to see that there is no defect above, below, or on either side, as the body ought to be quite perfect before they are put into the furnace. In this way

when the kiln is opened all the responsibility may be thrown upon the bakers. If the fire be too weak the paste will sink, if too fierce it will be broken to pieces.

'No. 17, called:—*Decorating Round Ware and Vases in Foreign Colouring.*

'Painting round ware and vases of white porcelain with designs in the five colours in imitation of Western Foreigners is called "foreign colouring" (*yang ts'ai*). Clever artists are selected to paint the porcelain and combine the different colours. They first paint upon a white slab of porcelain, which is baked to test the properties of the colours and the length of firing they require. They are gradually promoted from coarse work to fine and acquire skill by constant practice. A clear eye, attentive mind, and exact hand, are required to attain excellence. The colours employed are the same as those used on cloisonné enamels upon copper. These are mixed with three different kinds of medium, the first turpentine, the second liquid glue, the third pure water. The turpentine is useful for free colouring, the glue adapted for thin washes, the water for retouching the colours in relief. To be painted, the piece either rests upon a table, or is held in the hand, or is laid upon the ground, whichever position is most convenient for the ready use of the brush.'

We find that the Arabian (*Ta-shih*) ware was similar to the enamel of Fo-lang. The *T'ung ya* says that this was made by the Fo-lin. In the Canton dialect this character *lin* is read *lang*, whence the name *Fo-lang*, also written *Fu-lang*, the modern *Fa-lan*. But what is known as Fo-lang enamel has the body made of copper, upon which the materials are laid and baked to make the coloured decoration. This is far from rivalling true porcelain in brilliance. In the porcelain decorated with foreign colours, it is only the colouring that is imitated, both form and design being superior. The *Hsüan-ho Hua P'u* relates that the Japanese paint small hill and river scenes with very deep colours, using abundance of gold and bright

greens. During the Sung Dynasty again Têng Ch'un wrote that Korean fans were painted with marvellously deep blue and green colours, differing from Chinese fans, which were executed in light blue and sea-green, and that they were beautifully finished in recent years. During the Ming Dynasty, Yang Ch'ih, a worker in Japanesè lacquer, acquired the art of painting the lacquer in colours, his landscapes and figures being of wonderful genius and life-like, not to be surpassed even on paper. There are frequent instances of such things beyond the seas. So Huang Shan-ku, speaking of Korean painting, said: 'The hearths of men beyond the seas are brought within our ken. Scenes of nature, fish and insects, all painted with the pen.' I would like to echo this verse.

'No. 18, called:—*The Open Stove and the Close Stove.*

'The white porcelain is first baked before it is decorated with painting in colours. After it has been painted it must be again baked to make the colours sink into the glaze. For this purpose two kinds of stove are used, one open, the other close. The open stove is used for the smaller pieces, the door of which opens outwards. A charcoal fire having been lighted all round, the pieces of porcelain are placed upon an iron wheel, supported upon an iron fork, by which it is passed into the stove, the wheel being made to revolve by means of an iron hook, so as to equalize the action of the heat. It is taken out when the colours appear clear and bright. The close stove is used for the larger pieces. This stove is three feet high and about two feet and a half across. It is surrounded by a double wall, and the charcoal fire is put inside, the walls being perforated below for the passage of the draught. The porcelain is put into the interior of the stove. The stoker holds in his hand a circular shield to protect him from the heat of the fire. The stove is covered with a flat slab of yellow clay, hermetically sealed, and opened again after a lapse of twenty-four hours. The method of baking all the yellow,

brown, and green glazed porcelain, is the same as the above.'

We find that, in the manufacture of the incense urns of the reign of Hsüan-tê, the brownish tea-dust colour was made by washing with mercury, rubbing and finally heating; the gold colour was produced by rubbing in some four times the gold made into a paste and roasting to a red heat. In this case also the bronze pots were coloured after being moulded, and finished by a second application of fire—a process analogous to the one described above.

'No. 19, called:—*Wrapping in Straw and Packing in Casks.*

'The porcelain when it has been taken out of the kiln is arranged in four separate classes, known as porcelain of superior colour, of second-rate colour, of third-rate colour, and inferior ware, and the prices are fixed high or low accordingly. The third-rate class and the inferior ware are reserved for local sale. The first-class round ware and the vases of both the first and second classes are wrapped up in paper and packed in barrels, and there are packers who attend only to this work. The pieces of second-class round ware are tied together in bundles of ten, called 'cylinders' (*t'ung*), which are wrapped in straw and also packed in barrels. The coarser porcelain for distribution to the provinces is tied up in coarse matting, in bundles of thirty and forty, or fifty and sixty, called *tzŭ*, meaning a load for a man to carry at the end of a pole. The matting is tied together with string and wound round with strips of bamboo, so as to be ready to be carried either by water or by land. The workmen who do this are included under the general name of "mat-men."'

We find in the *P'ai shih lei pien* that the government porcelain, on the same day that it was taken out of the kiln, was examined several times to separate the good pieces from the bad, because although the form and

substance were fixed beforehand, the success of the firing could be seen only when the kiln was opened. The Official Records say that if the kiln be dry, the ware dry, and the fuel dry, there will be but few failures from breakage and no dullness of colour: and also that if the materials of the paste be fine, the colours fine, and the work fine, there will be no defects of coarseness, roughness of surface, or staining. The firing also must be uniform for the glaze and colours to come out lustrous, and the porcelain to be altogether good. The first-class porcelain is complete in all these points. In the inferior classes, when a piece is not entirely covered with glaze, the term '*ku*' is used for it, when cracked or perforated, '*mieh*,' when imperfect or fractured at the rim, '*mao*.' All such pieces are put into the lowest class.

'No. 20, called:—*Worshipping the God and Offering Sacrifice.*

'Ching-tê Chên, although it be only some ten odd *li* in length and breadth, environed by hills and surrounded by water, so as to form a little isolated spot, yet, on account of its porcelain production, merchants travel to it from every quarter of the empire. The private kilns, amounting to between two and three hundred, employ some hundreds of thousands of workmen and assistants, giving the means of subsistence to a very large number of people. The fire stands in the same relation to them as fine weather and rain to others, and they depend on porcelain as others do on millet and corn. Hence the importance to them of grateful worship. Their god, named T'ung, was once himself a potter. In former times during the Ming Dynasty, after the large dragon fish-bowls had failed in the baking year after year, the eunuchs in charge inflicted the most severe punishments, and the people were in bitter trouble. The god, throwing away his life for the rest, leaped into the midst of the furnace and died there, and the dragon-bowls were afterwards taken out quite perfect. His fellow-workmen, pitying him and

wondering, built a temple within the precincts of the government manufactory, and worshipped him there under the title of 'Genius of Fire and Blast', so that his fame was spread abroad. The potters offer annually reverent sacrifice, just as others worship the gods of agriculture and land.'

We find that early in the Ming Dynasty eunuchs were appointed to superintend the manufactory. This was stopped later, when the assistant prefect of each of the prefectures in the province was appointed in rotation. Finally, on account of the distance of the other prefectures, the assistant prefect of Jao-chou was detached and sent to take sole charge of the work. The eunuchs, however, under pretence of imperial orders, still continued their exactions. In the fifth year (A. D. 1571) of the Emperor Lung-ch'ing, the President of the Censorate, Hsü Shih, presented a memorial upon the report of the eunuch in charge of the rice transport and treasuries, who had stated that the supply of the different kinds of porcelain had run short, and required that, including the bowls, teacups and wine-cups of bright red glaze inside and out, the large and small dragon fish-bowls and covered square boxes, there should be made altogether 105,770 pieces. The memorialist wrote that the dragon bowls of the form required with broad bottoms and projecting sides were constantly broken and cracked, that the coloured bowls were too heavy and large and the colouring too elaborate, and that they also were often accidentally broken to pieces. In the eleventh year (A. D. 1583) again of the Emperor Wan-li, the Supervising Censor of the Board of Works, Wang Chin-min, memorialized:—'Now, with reference to the lists of this eunuch, the bowls, plates, teacups and wine-cups, being for the service of the Sovereign, must be provided. Still less must there be any deficiency in the sacrificial vessels. But as to the chessmen included, the chessboard, and the jars to hold the pieces, these are things of no utility; so also the wind-screens, pencil-tubes, vases and jars, covered boxes and

incense-pots requisitioned are matters of no special urgency. The total of over 96,000 articles is, moreover, far too extortionate.' The exact date at which this 'Genius of Fire and Blast' lived is unknown, but it was probably about this time. In these latter days, when the people are cherished and trade encouraged, work is profitable and life. easy, yet the fame of this deed ought to be kept alive.

# BOOK II

## DESCRIPTION OF ANCIENT WARE.

### 1. Invention of Pottery.

The *Chou Shu* says: 'Shên-nung made earthenware'.

The *Wu Yuan*: 'Shên-nung made the jars *wêng*'.

The *Kan Chu*: 'The character *p'ing*, vase, is written with radical *wa*, earthenware, or with radical *fou*, pottery. These vases were first made by Shên-nung.

Referring to the *Li Yun*, we find it says that the sages who invented things lived after (the beginning), and that they took advantage of the properties of fire to mould metal and fashion earth, although it is impossible to fix the dynasties during which they flourished. The *Tso Chuan* records that the ancient emperor Yen Ti distinguished the ranks of his officers by fire. So the utility of fire in the fabrication of things must have been known to Yen Ti. Therefore the invention of earthenware is attributed to Shên-nung (who reigned under the dynastic title of Yen Ti), although such reference to an exact date cannot but be arbitrary. In the old dictionary *Shuo Wên* the character *p'ing* for vase is written under the radicals *fou* pottery, and *wa* earthenware, just as in the *Kan Chu*, referred to above. In like manner the vessels *wêng*, *p'u* and *ying* are all given under both of these two radicals. The *Lu Shih* again says that the legendary ruler Sui Jên first made the pots *fu*.

*Lü Shih Ch'un Ch'iu*: 'The Emperor Huang Ti had a Superintendent of Pottery, K'un-wu, who made pottery'. See also *Shih Tzŭ*.

*Shuo Wên*: 'In ancient times K'un-wu made pottery'.

*Ku Shih K'ao*: 'In the time of Shên-nung they ate grain, the rice being roasted upon stones to cook it for

food. In the time of Huang Ti they had as cooking-vessels *fu* and *tsêng* (boilers and vats)'.

*Wu Yuan*: 'Hsüan-yuan made *wan* and *tieh* (bowls and plates)'.

We find this Superintendent of Pottery of the Emperor Huang Ti the first instance of the appointment of an officer. With regard to eating grain roasted upon stones, this ought rightly to be referred to the time of Sui Jên, because in the time of Shên-nung there were already boilers and vats. The first mention of bowls and plates appeared later, so that the *Wu Yuan* speaks of them without sufficient authority.

*Ch'un ch'iu Chêng yi*: 'Shao Hao had five Superintendents of Works. The workers of earthenware were called *tzŭ-chih* and were given the eastern quarter; the Commentator Fu Ch'ien explaining this title to be derived from the fact that they made measuring vessels'.

We find that this is an extract from the *K'ao kung chi*, and that the new name was probably of arbitrary invention.

*K'ao kung chi*: 'The dynasty of Yü highly esteemed pottery'. The Commentator adds that the Emperor Shun was plain and simple and valued vessels of pottery, of which the wine-vessels called *wu* and *t'ai* and the earthenware coffins *wa kuan* were examples.

*Li Chi* in the Section on Ancestral Worship mentions: 'The *t'ai* wine-vessels of the dynasty of Yü'.

*Han Fei Tzŭ*: 'Shun of the dynasty of Yü made vessels for food'.

The *Shih chi* in the Records of the Five Emperors says: 'Shun fashioned pottery at Ho-pin. The vessels made at Ho-pin were never faulty or cracked. He made common household ware at Shou-ch'iu'.

We find that the first articles of pottery invented were cooking-vessels, which were made in all probability like those in the present day of yellow clay. Coming to the time of Yü, the different kinds of wine-vessels are distinguished by name, and the sacrificial vessels are gradually becoming complete. They no doubt varied in their re-

spective coarseness and fineness, hence the expression of 'valuing pottery'. In later times O-fu of Yü submitted to the Chou sovereign and was appointed by him Superintendent of Pottery; and Ching-chung, a native of Ch'ên, fled to the State of Ch'i, where he was made Superintendent of Works. These are both instances of the lineal transmission of skill in pottery.

The *Li Chi*, in the Section *Ch'ü li*, says: 'The six Directors of Works of the Son of Heaven regulated the manufacture of the six raw materials. The arts of fashioning on the wheel and of moulding clay were included in the pottery manufacture.'

We find that according to this Section the Son of Heaven, in the appointment of these six great officers, as well as of those enumerated below, in the view of the Commentator Chêng, only adopted the regulations of the preceding Dynasty, the Yin (1766–1122 B.C.).

*K'ao kung chi*: 'For the fabrication of pottery there are two classes of workmen, those who fashion it on the wheel (*t'ao*) and those who mould the clay (*fang*).'

Again: 'The workers on the wheel (*t'ao jên*) make the caldrons (*yen*), the basins (*p'ên*), the colanders (*tsêng*), the boilers (*li*), and the vessels (*yü*). The moulders (*fang jên*) make the sacrificial vessels (*kuei* and *tou*).'

Again: 'Whenever there is in any of the pieces produced by the throwers or moulders either breakage or damage, crack or imperfection, the piece is not admitted into the market.' Again: 'The vessels are shaped upon the wheel, the sacrificial tazza-shaped dishes (*tou*) by the use of the plumb-line.'

We find in these regulations of the Chou Dynasty (1122–256 B.C.) that the work of the throwers and moulders was kept distinct. The articles made by the former, the *t'ao jên*, were all intended for cooking, with the exception of the *yü*, which was a measuring vessel; while the vessels made by the latter, the *fang jên*, were for sacrificial use. The different things produced must have varied in fine or coarse work, just as in later times there

were separate kilns and separate branches of work. The *Commentary* explains the term used, *po chih*, to mean the manufacture or welding of ductile clay, which must have included the operations of collecting the earth, washing the paste, and shaping the clay. The *Commentary* also says that (in the faults referred to as excluding from the market) *k'ên* meant damaged, *nieh* cracked, *p'o* bulging from weakness, the fourth character, read *kua* by the elder Chêng, *yueh* by the younger Chêng, being given the same meaning of injured, comprising what would be called in modern parlance broken, misshapen, or cracked pieces. The *Commentary* says, again, that when the piece was fashioned upon the wheel, the model was put beside it to be copied, and that the plumb-line was suspended to give uprightness to the stem of the tazza-shaped dish. We have here the moulds, the potter's wheel, and the polishing-wheel. The invention of the wheel and of the mould has already been made. So in my own humble opinion the first invention of pottery may be ascribed to the Yü Dynasty (third millennium B.C.), its perfection to the Chou Dynasty (1122–256 B.C.).

## 2. Investigation of Ancient Pottery.

### *Yueh-chou Pottery of the T'ang Dynasty* (A.D. 618–906).

Shao K'ang of the Hsia Dynasty conferred upon his younger son Wu Yü the principality of Kuei-chi, with the title of Yu Yueh. The Ch'in Dynasty made this place the capital of a province called Kuei-chi Chün. The Sui Dynasty changed the name to Yueh-chou, the T'ang called it at first Kuei-chi Chün, but reverted afterwards to the name of Yueh-chou. It is the modern Shao-hsing Fu in the province of Chêkiang.

The *Ch'a ching* by Lu Yü says:—'Among bowls (*wan*) those of Yueh-chou rank first, Ting-chou bowls next, Yo-chou bowls next, Shou-chou bowls next, Hung-chou bowls next. Some class Hsing-chou bowls above those of Yueh-chou, but they are certainly wrong. The Hsing-

chou porcelain resembles silver, while the Yueh-chou porcelain resembles jade, the first point in which Hsing is inferior to Yueh; the Hsing-chou porcelain is like snow, the Yueh-chou porcelain like ice, the second point in which Hsing is inferior to Yueh; the Hsing-chou porcelain being white, the tea appears red, while the Yueh-chou porcelain is green and gives a greenish tint to the tea, the third point in which Hsing is inferior to Yueh.'

*Yo fu tsa lu*:—'Under the T'ang Dynasty, in the first year (A. D. 847) of the period Ta-chung, among the officers who were appointed to regulate the music, was the Governor of the city Ta-hsing Hsien, Kuo Tao-yuan, who was skilled in playing on cups (*ou*). He used twelve cups of Yueh-chou or Hsing-chou porcelain which he played upon with a chopstick.'

The Verses of Lu Kuei-mêng contain the following stanzas:—

'The misty scenery of late autumn appears when the Yueh kilns are thrown open:

'The thousand peaks have been despoiled of their bright colour for the decoration of the bowls.

'Let us take them out at midnight to collect the falling dew,

'Or fill up the cups with wine in emulation of Chi Chung-san.'

This Yueh-chou porcelain of the T'ang Dynasty was really the original type of the prohibited colour porcelain (*pi-sê yao*) of the Ch'ien family, who were proclaimed princes of Wu and Yueh at Hang-chou, A. D. 907, and ruled till 976. In after times, when this name of *pi-sê* was given to the porcelain fabricated for Imperial use, its origin was forgotten. The verses of Lu Kuei-mêng are quoted in the *Fu hsüan tsa lu* to prove that this Yueh-chou porcelain existed already during the T'ang Dynasty. The book *Ssŭ liu fa hai* cites a memorial by Liu Tsung-yuan (written by him for a man who was bringing his porcelain to the court), with a view of supplying an omission in the



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*Fu hsüan tsa lu.* I only just allude to this, however, because there is no clear reference in it to Yueh-chou porcelain. Tu Yü of the Chin Dynasty (fourth century A. D.) in his verses on tea refers to 'Cups selected of choice porcelain brought from Eastern Ou', and this Ou refers also to Yueh-chou. Compare the *Ch'a ching*, which says that this place was included in Yueh-chou. Among other contemporary writers of the period Ku K'uang in his verses on tea speaks of 'the cups of Yueh-chou paste like jade'; Mêng Chung in one of his verses refers to 'Yueh-chou cups like moulded lotus leaves'; Chêng Ku has a stanza, 'The tea is fresh, bring Yueh-chou cups'; Han Wo another, 'The Yueh-chou cups filled with tea give out its fragrant aroma.' These references to Yueh-chou porcelain may suffice, and I have joyfully collected them and included them in this section headed 'Yueh-chou Pottery of the T'ang Dynasty'.

Again, the *T'ang kuo shih pu* says that the white porcelain cups of Nui-ch'iu, and the brown stone ink-pallets of Tuan-hsi, were distributed among high and low alike throughout the empire. Referring to the Geographical Records in the Annals of the T'ang Dynasty, we find at Chü-lu Chün in Hsing-chou a city called Nui-ch'iu mentioned, so that we see that Hsing-chou porcelain also was highly esteemed at this time. So also Kuo Tao-yuan, as described above, for his musical cups used both Hsing-chou and Yueh-chou porcelain.

In the collected writings of Tu, the President of the Board of Works, there is a verse of his included, in which he begs from Wei-ch'iu a bowl of Ta-yi porcelain: 'Of porcelain baked at Ta-yi, so light and yet so strong; Resounding like pure jade when struck, and famed through the city of Chin.' This Ta-yi, which was situated in Ch'iung-chou during the T'ang Dynasty, is not included among the places producing porcelain enumerated in the *Ch'a ching.*

The art of pottery flourished during the T'ang Dynasty. So the *P'ing hua p'u* says that in ancient times there were

no porcelain vases, all being made of copper, and that it was under the T'ang Dynasty that pottery was first prized.

*Pi-sê Porcelain of Wu Yueh.*

This was baked at Yueh-chou for the use of the sovereign during the rule of the house of Ch'ien. (A.D. 907–76.)

*Kao chai man lu*:—'The porcelain baked at Yueh-chou for the sovereign was reserved for his special use, the officers and people not being permitted to use it, for which reason it was called *pi-sê* (prohibited colour)'.

We find, however, that Wang, Prince of Shu, among the presents which he sent to Chu of Liang, included some gold-rimmed bowls which were described in these words:—'The gold rims protect the glaze of the precious bowls. The prohibited colour (*pi-sê*) preserves the tone of the green porcelain.' So the name of *pi-sê* was already at this period (the beginning of the tenth century A.D.) applied to porcelain. If it were only given to that baked for the use of the ruler of Wu Yueh, how could Wang of Shu have some to present to the Liang Emperor (after Liang Dynasty, A.D. 907–22)?

*Ch'ai Porcelain of the Posterior Chou.*

This was made in the reign of the Emperor Shih Tsung (A.D. 954–9) of the Ch'ai family, and from this derived its name of Ch'ai porcelain. Tradition says that when at the time a memorial was presented to the Emperor to ask about the decoration required, Shih Tsung wrote upon it:—'The blue of the sky after rain when the clouds have broken, this is exactly the colour which you must give to the porcelain.'

*Yi mên kuang tu*:—'Ch'ai porcelain, which comes from the North country, is sky-blue in colour, of rich lustre and delicate beauty, with a finely crackled glaze. It has often coarse yellow clay on the rim of the foot. In the present day it is very rare.'

*Po wu yao lan*:—'It used to be said in describing Ch'ai porcelain that it was as blue as the sky, as clear as a mirror, as thin as paper, as resonant as a musical stone of jade.'

*Shih wu kan chu*:—'Ch'ai porcelain is of perfect make and wonderful colour. It stands at the head of the different kinds of porcelain.'

*Ch'ing pi tsang*:—'Talking of porcelain, we must discuss that of Ch'ai, Ju, Kuan, Ko and Ting. Ch'ai porcelain is no longer to be found. I once saw a fragment of a broken piece mounted into a girdle-buckle which agreed with the description in regard to its colour and glaze but differed in being thick.'

We find that the capital of the Posterior Chou Dynasty was at Pien,[1] which was during the T'ang Dynasty the principal city of the province of Honan. According to the Geographical Records of the T'ang, this province of Honan produced for the use of the Emperor porcelain vessels, so that this district was then already known for its pottery. In the Sung Dynasty the Imperial porcelain (*Kuan yao*), during the period Chêng-ho (A.D. 1111–17), was at first also produced at Pien. Ju-chou likewise was within the bounds of the province of Honan of the T'ang Dynasty. The Ch'ai porcelain was no doubt made at the capital. Kao T'an-jên (seventeenth century A.D.) writing about a flower-vase of Chün porcelain of the Sung Dynasty, to explain his verses, says that people in his day when they found a broken piece of Ch'ai porcelain would frame it and mount it like a precious stone, it was so rare and highly prized. Wang Yü-yang is described in the *Hsiang tsu pi chi* as saying, 'How lucky it would be even for a rich man to get a single bowl, in colour like a solid jewel, with its rays flashing out light on every side.'

### *Ting Porcelain of the Sung Dynasty.*

Made at Ting-chou, now Chên-ting Fu, in the Province of Chih-li.

[1] The modern K'ai-fêng Fu.

*Ko ku yao lun*:—'Pieces of ancient Ting-chou porcelain, in which the structure of the paste is fine, the colour white and of rich lustre, and highly esteemed; those of coarse make and yellowish colour being of less value. Those which have tear-drops outside are genuine. Those with engraved designs are extremely beautiful, but the plain pieces are also good, while those with painted decoration are inferior. The porcelain pieces of the periods Hsüan-ho (A.D. 1119–25) and Chêng-ho (A.D. 1111–17) of the Sung Dynasty are the best, but a perfect set is very rare. There is brown Ting-chou porcelain in which the colour is brown, and also black Ting-chou porcelain with a glaze as black as lacquer.'

*Liu ch'ing jih cha*:—'The pieces which resemble Hsiang porcelain in colour and are decorated with engraved designs fine as bamboo threads belong to Northern Ting-chou porcelain. The Southern Ting-chou porcelain decorated with floral designs was made after the Dynasty had been moved to the south.'

*Po wu yao lan*:—'There are three kinds of Ting-chou porcelain, the first with engraved designs, the second with painted decoration, the third with moulded patterns. The most common designs are also three, derived from the peony, lily, and flying phoenix. The fabric and decoration of the porcelain of this period are usually cleverly finished.'

*Ch'ing pi tsang*:—'There are two varieties of Ting-chou porcelain, the first with smooth glaze, the second ornamented with designs executed in relief. The best is white in colour, of white paste covered with glaze, and when this glaze has drops upon it like tears it is highly valued. There are also black and brown pieces, but these are not worth much.'

We find that among Ting-chou porcelain the Northern Ting-chou is ranked first; and out of this Northern Ting-chou porcelain, that belonging to the periods Chêng-ho and Hsüan-ho is considered to be the best. Tung-p'o (A. D. 1036–1101), however, in his verses on 'Boiling Tea in the Examination Hall', alludes to 'The flowered Ting-

chou porcelain like carved red jade', and did not he flourish before the Hsüan-ho and Chêng-ho periods? He mentions here 'flowered porcelain', which shows that there must have been some so decorated besides that made after the removal to the south. Again, during the Mongol Yuan Dynasty (A. D. 1280–1367), a worker in gold named P'êng Chün-pao made, in imitation of Ting-chou porcelain, pieces of perfect shape contracted at the waist. This is called after him P'êng porcelain, and it was known at the time as New Ting-chou porcelain. The *Ko ku yao lun* says of it that although the structure of the paste was fine and the colour white like Ting-chou porcelain, the dark-coloured mouth was less richly glazed and very fragile. Again, the *Po wu yao lan* says that the new imitations of Ting-chou porcelain, like the Wên Wang bronze-shaped incense urns,[1] and the vases ornamented with animals' heads and halberd ears, were not inferior to the productions of the Ting-chou potters, so that they might even be mistaken for genuine pieces, the best being early pieces of the manufacture of Chou Tan-ch'uan. Lovers of ancient art-work who can distinguish Southern from Northern Ting-chou, and are not taken in by these later imitations, have no reason for shame, and may be reckoned connoisseurs.

*Ju-chou Porcelain of the Sung Dynasty.*

During this period, when the white porcelain from Ting-chou was being roughly made, the Emperor ordered a manufactory to be founded at Ju-chou, where a green porcelain was made, which was glazed with powdered carnelian.

*Liu ch'ing jih cha*:—'During the T'ang Dynasty porcelain was made both at Têng-chou and at Yo-chou, but that of Ju-chou was ranked highest. It resembled Ko porcelain in colour, but had a slight yellowish tinge.'

*Ko ku yao lun*:—'The Ju-chou porcelain of the Sung period is of pale green colour. That with crab's-claw

[1] See Fig. 3.

markings is genuine, although when without markings it is still better. The paste has a rich lustre and is thin, but it is very rare.'

*Po wu yao lan*:—'Ju-chou porcelain is whitish like an egg-shell in tint, with a thick transparent glaze, resembling a deep layer of lard. This glaze, however, exhibits throughout a palm-leaf veining, with some resemblance to crab's claws. At the bottom of the pieces there are sesamum flowers and small fine nails.'

*Ch'ing pi tsang*:—'Ju-chou porcelain, when compared with Kuan (Imperial) porcelain of the period, excels the latter in form and in structure, as well as in its rich lustre.'

We find that the Ju-chou potteries originally produced green porcelain.[1] The *Liu ch'ing jih cha* says that it has a slight yellowish tinge; the *Po wu yao lan*, that the colour is white like an egg-shell. These two statements appear to be contradictory, but by combining the two we may obtain a light green colour. The peculiar crab's-claw markings are like the so-called thrush-eye spots distinctive of Tuan-hsi pallet-stones, which are really flaws in the stone, although they are characteristic of the product of the true mine. This is why it is said above that the best has no such marking.

### *Kuan (Imperial) Porcelain of the Sung Dynasty.*

During the Sung Dynasty in the period Chêng-ho (A.D. 1111–17), there was established at the capital (now K'ai-fêng Fu) a manufactory, the porcelain produced at which was called Kuan (Imperial) ware.

*Liu ch'ing jih cha*:—'The best is white in colour and as thin as paper. It is inferior to Ju-chou porcelain and the value comparatively less.'

*Po wu yao lan*:—'This Kuan porcelain is generally classified as about equal to Ko porcelain. The light green colour is considered the best, the white ranked

[1] Fig. 20 represents an ancient vase of Ju-chou porcelain of the Sung Dynasty with Buddhist decoration.

next, the ash-grey lowest. With regard to the crackling, that with lines like broken ice of the colour of eel's blood is put first, that like plum-blossom petals stained with ink next, fine irregular broken lines last.'

*Kuan (Imperial) Porcelain of the Sung Dynasty, from the Hsiu Nui Ssŭ.*

After the Sung Dynasty had crossed the Yellow River to the South (A. D. 1127), Shao Ch'êng-chang as Director founded what was called after him Shao's Manufactory, in which he copied the porcelain formerly made at the old capital. He set up kilns at the Hsiu Nui Ssŭ, and baked there a green porcelain called *Nui yao* ('Palace Porcelain'), known also as *Kuan yao* ('Imperial Porcelain').

*Liu ch'ing jih cha*:—'The forms of the pieces are perfectly moulded and decorated with a clear transparent glaze, and it is generally admired.'

*Ko ku yao lun*:—'The pieces of Kuan (Imperial) porcelain made during the Sung Dynasty at the Hsiu Nui Ssŭ are of fine transparent paste, the colour is green with a slight pinkish tinge of two shades, deep and pale. It has crab's-claw markings, a brown mouth, and iron-coloured foot. The best resembles generally Ju-chou porcelain.'

*Po wu yao lan*:—'The Imperial Potteries at Hang-chou were situated under the Phoenix Hill. The porcelain earth was brown, from which cause the colour of the foot was like iron. It was said at the time to have a brown mouth and iron foot, the brown mouth being only because, the mouth of the piece being at the top, the glaze running down covered it less thickly than the body, so that the mouth exhibited traces of brown. What is there worthy of notice in this? The iron foot was valued as showing that the clay of no other place was equal to this.'

*Pai shih lei pien*:—'Later beneath the Altar of Heaven new potteries were built, which were also called Kuan (Imperial) Potteries, but the porcelain produced here differed widely from the old ware.'

In classifying ancient porcelain, the Ch'ai and Ju-chou

porcelain are placed first, and next to these the Kuan (Imperial) and Ting-chou porcelains. Very few examples of the Ch'ai and Ju-chou porcelains have survived to the present day. Some pieces of the Imperial and Ting-chou factories remain, although even these are not so easy to find. Among the latter we have Northern Ting porcelain, Southern Ting porcelain, and the porcelain of P'êng, which was also called New Ting porcelain. Among the Kuan (Imperial) porcelain we have that made at the ancient capital (K'ai-fêng Fu), that made at the Hsiu Nui Ssŭ (at Hang-chou), while the newer ware produced beneath the Altar of Heaven was also called Imperial porcelain. The new Ting porcelain is not equal to the Southern Ting, and this again is not equal to the Northern Ting porcelain. The Imperial porcelain at the ancient capital was produced for a brief period only, and consequently the Hsiu Nui Ssŭ porcelain is ranked highest, the new Imperial ware lowest. There were all these different kinds made at the time, and besides, the author of the *Po wu yao lan* tells us that there were in his time produced modern imitations of Ting-chou pieces, some not inferior to those of the original potters, which, however, although of most clever workmanship, were not admitted into the best collections. The *Ko ku yao lun* describes a variety of Kuan (Imperial) porcelain of black colour called *Wu-ni* (Black paste) porcelain, the imitations of which were all made at Lung-ch'üan, and had a glaze without any crackles. Again, the *Liu-yen Chai Pi chi* tells us that the *Pi-sê* (Prohibited Colour) porcelain of Yü-yao made during the Southern Sung Dynasty was generally regarded as Kuan (Imperial) porcelain by his contemporaries, who did not clearly distinguish it, and that he had seen and heard of a large number of these pieces mistaken for genuine. This being so, when an expert points to this as a Ting-chou piece and to that as an Imperial piece, how can he be certain that he is not being deceived by a 'false incense urn'?

In discussing pieces of Nui (Palace) porcelain, Yeh Chih in his *Pi hêng* says that the body being made of well

levigated paste, and the piece artistically finished, the excellent result depended upon the intrinsic workmanship, while the ordinary criteria of brown mouth and iron foot were mere surface characteristics. The points are well stated above in the *Po wu yao lan.* The *Wu tsa tsu* says that unbroken pieces of Ting-chou and Ju-chou porcelain were rarely met with, although that used in the palace during the Sung Dynasty generally had the mouth bound round with a copper collar, thus lessening its value. Yet collectors in the present day of Ting-chou and Ju-chou pieces look upon those only which have the rims bound with copper as genuine, and dealers in curios in talking of antiques generally say the same.

*Ko Porcelain of the Sung Dynasty.*

The earlier Lung-ch'üan porcelain was made at Liu-t'ien. Two brothers named Chang, the elder and younger, natives of Ch'u-chou, were directors of two different manufactories at Lung-ch'üan, and the porcelain made by the elder brother was called, to distinguish it, *Ko* (the elder brother's) porcelain.

*Ko ku yao lun*:—'Ancient *Ko* porcelain is green in colour, of two shades, deep and pale. It has an iron-coloured foot and brown mouth. When of good colour it resembles *Tung* porcelain, and is now also rare.'

*Pai shih lei pien*:—'The best specimens are of fine paste and thin, covered with a thick pure glaze. This *Ko* porcelain has a number of broken lines upon it, from which it gets its name of "hundred-fold crackle".'

*Ch'un-fêng T'ang Sui pi*:—'*Ko* porcelain is nearly white with broken lines upon it.'

*Po wu yao lan*:—'The *Kuan* (Imperial ware of the Sung) porcelain exhibits throughout faint lines like crab's claws, while the *Ko* porcelain has throughout faint marks like fish-roe, but the glaze of the latter does not equal that of the Imperial porcelain.'

*Wu tsa tsu*:—'Besides *Ch'ai* porcelain we have pieces of Sung porcelain from the Ting-chou, Ju-chou, Imperial,

and Ko potteries. In the present day it is only *Ko* porcelain that is at all easy to get, and this has only been preserved on account of its comparative thickness. Perfect unbroken pieces of Ting-chou and Ju-chou porcelain are difficult to find.'

*Lung-ch'üan Porcelain of the Sung Dynasty.*

This comprises the porcelain fabricated by Chang the younger. The name of *Ko* porcelain was given at the time to that made by the elder brother, while the old name was kept for that fabricated by the younger brother, and it was still called Lung-ch'üan porcelain.

*Pai shih lei pien*:—'Lung-ch'üan porcelain is called even up to the present day Chang porcelain by natives of Wên-chou and Ch'u-chou.'

*Ko ku yao lun*:—'Ancient Lung-ch'üan porcelain is now called "Ch'u-chou ware", "Green ware", or "Ancient green ware". The body is of fine paste and also thin. That of bright deep green colour is most prized, the rest is a pale green. There is one kind of basin with a pair of fish at the bottom. Those which have outside copper rings for handles are of coarse thick fabric and not valuable.'

*Po wu yao lan*:—'The best Lung-ch'üan porcelain is considered to rival Imperial and Ko porcelain, but the crackle lines and brown paste are more rare. The pieces are of thick and solid fabric, so that they are not easily cracked or injured.'

*Ch'ing pi tsang*:—'Ancient Lung-ch'üan porcelain is of finely-worked paste, but thick fabric. The colour is a deep grass (*lit.* onion) green. The best is considered equal to the Imperial ware, but it has neither crackles, nor brown mouth, nor iron-coloured foot. It wears wonderfully well, and is not readily cracked or broken, only the workmanship is rather clumsy, the designs neither antique nor artistic. Some pieces formed of white paste are covered outside with the green glaze so thinly that traces of the white body show through. This was made by Chang,

who lived during the Sung Dynasty, and it is consequently called also Chang porcelain. He adopted the Lung-ch'üan methods of manufacture, and improved upon them in the fineness of his work and excellence of his designs.'

*Ch'un-fêng T'ang Sui pi*:—'The green porcelain fabricated by the younger brother (Chang) was of deep pure colour like beautiful jade, and it was universally admired. It resembled the Imperial ware of the period, while the porcelain made by the elder brother was paler in colour.'

Referring to the *Pai shih lei pien*, we find that, in describing the porcelain of the elder and younger Chang, it says that the colour in both was green, varying in its deep or pale tint, and that the feet in both were iron-coloured, also varying in their dark or light colour, adding that, although old accounts mentioned brown feet, such pieces were then rarely seen. The *Ko ku yao lun* again describes the ancient *Ko* porcelain as green in colour, either dark or light, and also as having an iron-coloured foot and brown mouth: the ancient Lung-ch'üan is a green porcelain with a body of fine paste and also thin, that of deep green colour being the most prized. The application, however, of the terms old and ancient to the manufactures of the two brothers was hardly apposite when the periods were not far distant. The presence or absence of lines of crackle is really the distinctive mark between the productions of the elder and younger brother. The statements that the porcelain of the elder was pale in colour, and that that of the younger was of thick fabric, are not founded on any real distinctions in the Chang family's work.

The *Ko* porcelain fabricated anew at the close of the Yuan Dynasty (fourteenth century A. D.) was clumsy in make, opaque, and also bad in colour. At the beginning of the Ming Dynasty (A. D. 1368) the manufacture of Lung-ch'üan porcelain was transferred to Ch'u-chou Fu, but the green colour, the materials of the paste and the firing, were all inferior to those of the older ware. Fang Mi-chih in the *T'ung yao*, says that the false *Ko* porcelain when it was crackled had not iron feet, and that if it had iron

feet it was not resonant; also that in the Lung-ch'üan porcelain they failed in the production of the light colour, for if light in colour it was not resonant. This is a useful point characteristic of the ancient kinds.

Again, the *Po wu yao lan* describes how pieces of the Kuan (Imperial) and Ko porcelains occasionally came out of the kiln with marks produced in the furnace upon the proper glaze, in the shape of butterflies, birds, or fish, unicorns or leopards, or with the colour of the glaze changed to yellow, red, or brown, and how the new forms and colours were sometimes most lovely spontaneous creations of the fire, the causes of which it was impossible to explain. The occurrence of such furnace changes, however, is hardly sufficient reason for astonishment. The works of Su Tung-p'o contain a poem upon a vase-organ, the preface of which relates how in the cyclical year *Kêng-ch'ên* (A.D. 1100), on the twenty-eighth day of the eighth month, while they were drinking wine at a farewell banquet to Liu Chi-chung, they heard the sounds of organ and flute, faintly echoing as if from above the clouds, rising and falling so that they could almost distinguish the musical notes, and how upon investigation it was discovered that they came out of a pair of vases, and how they stopped when the meal was over. The *Ch'un chu chi wén* contains an essay by Wan Yen-chih upon 'Ice Pictures in an Earthenware Basin', in which he says:—'When I was living in the Capital, waiting for an appointment, copper was strictly prohibited, and I purchased this basin in the street for some ten cash to wash my hands in. It was very cold weather, and after I had filled it one day with hot water to wash my face, and afterwards emptied it, the water remaining at the bottom of the basin froze, and I saw before me a spray of peach blossom. On the morrow there appeared a branch of peony crowned with two flowers. On the next day a winter landscape was formed, filling the basin, with water and villages of bamboo houses, wild geese flying, and herons standing upon one leg, all as complete as a finished picture. I afterwards

had it mounted with silver and inclosed in a silk-lined case. When the cold weather comes I invite guests to enjoy the sight. The pictures have never been twice alike.' These are quoted as two examples of magic, one stranger than the other.

### *Chi-chou Porcelain.*

Made at Yung-ho Chên, in Lu-ling Hsien, a department city of the modern prefecture Chi-an Fu.

*Ko ku yao lun* :—'The colour of this is like that of the brown porcelain of Ting-chou, but it is of thick material and coarse make, and not worth much money. In the time of the Sung Dynasty there were five potteries, among which that of Shu Kung produced the best ware. There were white-coloured and brown-coloured pieces, the flower-vases being large and worth several ounces of silver each. The small vases were decorated with painted designs. It also included crackled pieces of fine form. Tradition says that when Wên, a Minister of State of the Sung Dynasty, passed through, the porcelain in the kiln was all transformed into jade, for which reason the potteries were closed.'

*Chü chai tsa chi*:—'During the Sung Dynasty, in the province of Kiangsi, porcelain was made in Lu-ling, at Yung-ho Shih, where lived Shu Wêng, who was skilled in making ornamental pieces. Wêng's daughter was still more clever, and was known as Shu Chiao. They made incense-burners and vases of colour and design equal to pieces of *Ko* porcelain. I have got a round dish and a bowl of greyish-white texture and bright glaze, which when filled with water will preserve it without change for a whole month, mere inspection of which is sufficient evidence of their antiquity. Tradition says that the pieces worked by the potters were transformed in the furnace into jade, whereupon the workmen, fearing lest this should come to the knowledge of the officers, closed the doors and fled to Jao-chou. Even in the present day many of the potters at Ching-tê Chên were formerly natives of

Yung-ho, as we see stated in the Travelling Notes of Wu P'ing, Prefect of Chi-an Fu.'

*Hsiang Porcelain.*

Made at Hsiang-shan Hsien in the modern prefecture Ning-po Fu.

*Ko ku yao lun*:—'This has the glaze marked with crab's-claw lines. The best is white in colour and bright in lustre; the inferior, yellow and coarsely worked. None of it is worth much money.'

*Tung Porcelain.*

*Ko ku yao lun*:—'It is of pale green colour marked with fine crackle lines, and has usually a brown mouth and iron-coloured foot. When compared with the Imperial ware of the period it wants red colour, the form is more clumsy, and the paste is less finely worked and opaque.'

We find that both the Chi-an Fu porcelain and the Hsiang porcelain resemble Ting-chou porcelain, and that the Tung porcelain resembles the Imperial ware of the Sung Dynasty. They differ in being of comparatively coarse fabric and less bright lustre. The *Liu ch'ing jih cha* says that the Hsiang porcelain is also inferior to that made by P'êng.

*Chün-chou Porcelain.*

Chün-chou is now Yü-chou in the province of Honan.

*Liu ch'ing jih cha*:—'This includes pieces of nearly every colour, the bright tints being even too glaring. Some pieces have the rabbit's-hair marking, others bluish flames of fire.'

*Po wu yao lan*:—'This includes pieces decorated with vermilion red, with bright onion green, vulgarly called parrot green, and with aubergine (egg-plant) purple. The three colours, rouge-like red, fresh onion-like bright green, and ink-like dark purple, when of uniformly pure colour with no stains, comprise the first class. They have inscribed underneath the numerals 1, 2, &c., to record the number of the pieces. The so-called colours, pig's-liver,

flaming red, and blotched blue and green like a baby's tear-stained face, these are only failures in baking of the above three glazes, not distinct varieties of colour. The vulgar names of nasal mucus and pig's-liver are only worthy of ridicule. There are flower-pots and saucers of this porcelain of great beauty. The other pieces, like the barrel-seats, the incense pots and round boxes, the square vases and covered jars, all have the paste made of yellow sand, so that the fabric is coarse. The new pieces made in the present day all have the body made of Yi-hsing clay, and consequently, although their glaze has some resemblance to the old, and the pieces are of good form, they will not resist wear.'

*Ch'ing pi tsang*:—'In classifying Chün-chou porcelain the rouge-like red is placed first, next the bright green like onion-sprouts, and then the ink-like purple. The best is of uniform colour, and has underneath the numerals 1, 2, &c. The mixed colours are not worth collecting.'

*T'ung ya*:—'Chün-chou porcelain of many (*lit.* five) colours transformed in the furnace is not rare at present. The image of Kuan-yin[1] in the temple Pao-kuo Ssŭ is a specimen of this class.'

[1] This celebrated figure of the Buddhist deity Kuan-yin is still enshrined in the same temple at Peking and visited by pilgrims, and the bonzes assert that it is a miraculous likeness produced by a visit of the goddess to the furnace while it was being fired. It is flanked by carved black-wood screens engraved with verses by the Emperor Ch'ien-lung, to which they point triumphantly as evidence of the truth of their words.

The image is about a foot high, well-moulded, seated on a lotus pedestal coloured crimson, the chin supported by the right hand, the elbow resting on the knee. The face, right arm, breast, and the left foot with sole pointing forwards, are bare, covered with an opaque white enamel. From a yellow necklet hangs a square network of yellow beads, attached to a red-brown inner garment girdling the waist. The figure is loosely wrapped in a gracefully-draped cloak of brilliant sky-blue (turquoise) colour, with black borders to the loose sleeves, turned back at the front to show their yellow lining, the upper part of which passes up behind over the head in the form of a plaited hood, also lined with yellow. The forehead is encircled

*Tz'ŭ-chou Porcelain.*

Made at Tz'ŭ-chou, in the prefecture Chang-tê Fu, in the province of Honan.

*Ko ku yao lun*:—'The best resembles Ting-chou ware, but it has no traces of tears upon it. It includes also pieces with carved decoration, with painted designs, and plain, and the price is as high as that of Ting-chou porcelain. The new is not worth alluding to.'

*Chien Porcelain.*

Made at Tê-hua Hsien, in the prefecture Ch'üan-chou Fu, of the province of Fukien.

*Ko ku yao lun*:—'The bowls and cups generally have expanded mouths. They are black in colour and of rich glaze. They have yellow rabbit's-hair marks and tear-drops, very large in genuine specimens. The fabric, however, is very thick, thin pieces being rarely met with. Some of the specimens of the old Fukien porcelain, however, are thin, and these are highly-prized specimens of Sung Dynasty ceramic art. The images of Buddha are specially beautiful.'[1]

We find that during the Sung Dynasty bowls with expanding mouths were preferred for tea, and the Chien-an rabbit's-hair cups were put in the first class and valued at a very high price. The *Liu ch'ing jih cha* places the black paste porcelain of Chien-an in the very lowest category. Modern and ancient opinions differ. The *P'ing hua p'u*, on the contrary, considers this black paste porcelain to

by a crown of gold and crimson with a tiny image inlaid in the centre, and flower designs in relief on either side. The right hand holds a circular mirror, with Sanscrit characters carved in openwork, of dark brown colour surrounded by a halo of yellow flames. It is really enamelled in 'five colours'—turquoise, yellow, crimson, red-brown, and black.

[1] This is the 'ivory-white porcelain' of collectors, the paste being, as Mr. Franks describes (l. c., p. xii), usually of a creamy-white resembling ivory, the glaze seeming to be closely blended with the paste, so as to have a satiny texture, like the surface of soft-paste porcelain.

rank on an equality with Lung-ch'üan, Chün-chou, and Chang family ware. The *Po wu yao lan* describes it as of coarse fabric, opaque, and of too glaring glaze. Having survived to his time, as well as the Imperial and Ko porcelain, the author placed it on the level of the Hsiang and Tung wares. The *Liu ch'ing jih cha*, which places it in the very lowest class, cannot be accepted as correct. For this reason Chien porcelain has been discussed at some length.

### *Shansi Porcelain.*

Made in this province at Yü-tz'ŭ Hsien, in the prefecture T'ai-yuan Fu, at P'ing-ting Chou, at P'ing-yang Fu, and at Ho-chou. That made at Ho-chou was known as Ho porcelain.

### *Korean (Kao-li) Porcelain.*

Made in the kingdom of Korea.

*Ko ku yao lun*:—'It is of pale green colour, and resembles Lung-ch'üan ware. Some is covered with white sprays of flowers, but this kind is not worth much money.'

We find that the porcelain of the Korean potteries resembled that of Jao-chou. It was finely decorated like the porcelain of Ting-chou. It is consequently placed here after the other kinds of porcelain.[1]

[1] We have some account of Korean porcelain of this period by a contemporary, Hsü Ching, an officer in the train of Lu Yun-t'i, who went to that country as ambassador from the Emperor of China in the year 1125, on the accession of a new king of Korea. He published on his return an illustrated account in forty books of the mission called *Hsüan-ho fêng shih Kao-li t'ou ching*, in which he writes:—'The Korean porcelain, which is green in colour, is declared by the natives to be of the colour of green-jade. In these latter years the forms are cleverly moulded and the colour of the glaze is good. They have wine-jars of the form of gourds, provided with little covers of lotus leaves with a duck seated upon them. They also make bowls, dishes, wine-cups and teacups, flower vases and hot-water bowls, all fashioned after the model of Ting-chou porcelain, so that I just allude to them without figuring them. Only the wine-jars are new and curious.' He also says:—'The Koreans at their feasts for drinking-vessels generally use gilded or silver cups, but

*Po-li* (glass) ware from foreign islands and *Fo-lang* (cloisonné) enamels are neither of them made of porcelain clay, for which reason they are not included in this work.

they also value green porcelain very highly. They have incense burners in the shape of a lion, also of bright green colour, in which the animal is crouching upon a lotus-leaf which forms its support. This is the best and rarest of all the things. The rest have a general resemblance to the ancient *pi-sê* porcelain of Yueh-chou and the new porcelain of Ju-chou.' The Koreans still make rough porcelain covered with a coarse white or green monochrome glaze often crackled. There is no evidence of anything in the country like the old Japanese cups of which Jacquemart made his *famille archaïque de la Corée.*

# BOOK III

## DESCRIPTION OF MING WARE.

### 1. Jao-chou Porcelain of the Ming Dynasty.

At Ching-tê Chên, situated at Hsi-hsing Hsiang in the district Fou-liang Hsien, within the bounds of the prefecture Jao-chou Fu, the water and earth are suitable for the manufacture of porcelain. This *Chên* derives its name from its having been founded during the Sung Dynasty in the period Ching-tê (A. D. 1004–7), when an official was specially appointed by the Emperor, as Director, to superintend the manufacture. Jao-chou porcelain dates from this period. The *Jung chai sui pi* quotes from the works of P'êng Ch'i-tzŭ, President of a Board, an ode sent to Hsŭ, a Tun-t'ien official, in which he refers to 'Fou-liang as skilful in the fabrication of porcelain rivalling the finest jade in its colouring', speaking of this place.

The Yuan Dynasty (A. D. 1280–1367) changed the title of the Director from *Chien-chên*, to *T'i-ling*, and made the Governor of the Province Superintendent of the Porcelain Manufactory. During the Sung and Yuan Dynasties, a special edict was always issued whenever porcelain was required for the use of the Emperor. If it was not issued, the manufacture was stopped.

The *Ko ku yao lun* says:—'The porcelain from the Imperial Potteries is of thin fabric and transparent, white in colour with blue decoration, and but slightly inferior to Ting-chou ware': referring here to porcelain of the Sung Dynasty. Again: 'In the Yuan Dynasty the pieces of the highest class were fashioned with small feet and moulded decoration, and had inscribed inside the two characters *Shu-fu*': referring here to porcelain of the

Yuan Dynasty.[1] And again: 'The plain pieces with large feet of modern manufacture are wanting in lustre. There are besides blue pieces, and others painted in many colours, but these are also common. Another class, decorated with blue or black glaze overlaid with gold, composed for the most part of wine-pots and wine-cups, is remarkable for its beauty': referring here to porcelain of the beginning of the Ming Dynasty. During the T'ang Dynasty (A. D. 618–906) porcelain in the province of Kiangsi was made at Hung-chou, the modern Nan-ch'ang Fu, as we see in the *Ch'a ching*. After Chü Chih-kao with other natives of Ch'u-chou had come to T'ai-p'ing Hsiang, in the district of Yi-yang Hsien, they introduced the manufacture, and porcelain was also fabricated here. Afterwards, during the reign of Chia-ching (A. D. 1522–66), there was a famine there during which the people rebelled, and the Director of the Porcelain Manufacture was moved and established at Hsing-an Hsien, soon after which time the post was abolished altogether. In this district of Yi-yang, at Hu-hsi and Ma-k'êng, pottery was made as a means of livelihood, consisting of vases, jars, fish-bowls, water-crocks, dishes and bowls, of a very coarse ware for the use of the workmen.

### *Hung-wu Porcelain.*

In the thirty-fifth year[2] of the reign of Hung-wu (A. D.

[1] There is one little vase of this Shu-fu porcelain of the Yuan Dynasty figured by Hsiang in his Catalogue (No. 21), four inches high, with a globular body and bulbous mouth. It is decorated with dragons in the midst of clouds and lion's-head handles all faintly engraved in the paste under a white glaze. The author says in describing it that the porcelain of his own Dynasty of the reigns of Yung-lo and Hsüan-tê, with designs engraved under the white glaze, was modelled after this kind, and that the Shu-fu porcelain itself was copied from that made at Ting-chou under the Northern Sung Dynasty, adding that 'the bottle in its paste and form, as well as in the colour of the glaze and the engraved design, is exactly like a piece of Ting-chou porcelain.'

[2] The Official Record says second year (1369), which is probably correct. The Emperor died in the thirty-first year of his reign.

1368-98) the founder of the Ming Dynasty, the manufactory was first opened, and the porcelain made sent to the capital (Nanking) for the use of the Emperor. A manufactory was built for the fabrication of the Imperial porcelain, having on the east side the offices of the Tao-t'ai of Kiukiang. The Imperial kilns were set up here and were of six different kinds, named the 'blast furnaces', the 'colour furnaces', the 'blue and yellow enamel furnaces', the 'large dragon-bowl furnaces', the 'seggar furnaces' and the 'blue furnaces'.

We find that the Official Records alluding to the Imperial kilns mention in addition to the kilns for the large dragon-bowls, 'blue furnaces' for baking the smaller pieces and 'colour furnaces' for roasting the colours. The Imperial furnace was round and narrow, and held a charge of about 300 of the smaller pieces. The blue furnaces of the people were longer and broader, and held a charge of some 1,000 of the smaller pieces. The porcelain baked in the private furnaces was placed in nine rows, the first two rows composed of coarse pieces, to break the force of the fire; the third row contained some good pieces; while the fourth, the fifth in the centre, and the fourth from the end, were occupied by the best pieces; and the three back rows again by coarse ware. The government furnace contained only porcelain of high value, and empty seggars were placed in the front row, to shield the rest from the flames. The porcelain produced in the government kilns was of uniform excellence; the private kilns included, on the contrary, all kinds. The government kilns were hermetically and strongly closed with bricks and mortar, to retain all the heat of the fire, by which means the porcelain was thoroughly baked, and came out perfect in material and form, differing in all these respects from the porcelain made by the people.

### *Yung-lo Porcelain.*

*Shih wu kan chu*:—'The porcelain during the two reigns of Yung-lo and Hsüan-tê was all made at the

Imperial potteries. It was usually of pure white colour with palm-leaf spots. Some was decorated with *Su-ma-li* blue, or made precious with the bright red glaze.'

*Po wu yao lan*:—'In the reign of the Emperor Yung-lo (A. D. 1403–24) were made the large shallow cups, of which those decorated inside with two lions playing with a ball are ranked first, those with mandarin ducks (*yuan-yang*) next, those with flowers painted inside next. These cups were decorated outside with blue designs of deep brilliant colour, and were most artistically painted. As to the copies of these made in the present day, they are not worth looking at.'

*Nan ts'un sui pi*:—'With regard to the porcelain made at Ching-tê Chên during the Ming Dynasty, in the reign of Yung-lo it was preferred thick, in the reign of Ch'êng-hua thin; in the reign of Hsüan-tê pale blue was fancied, in the reign of Chia-ching dark blue. The Ch'êng-hua blue was not equal to the Hsüan-tê blue, the Hsüan-tê colours were not equal to the Ch'êng-hua colours.'

*T'ung ya*:—'Yung-lo porcelain was liked thick, Ch'êng-hua porcelain thin, and there were considerable differences, both in the shape and in the fabric, in the former and latter periods.' We find that in ancient porcelain blue (or green) was the colour most highly esteemed, till we come to the Ming Dynasty, when the art of decorating with the *pi-sê* glaze was lost, and the porcelain was all made pure white, either painted in blue or enamelled in many colours. That of the reign of Yung-lo deserves appreciation, and may be ranked below the porcelain of Hsüan-tê and Ch'êng-hua, above that of Chia-ching.

### *Hsüan-tê Porcelain.*

In the reign of Hsüan-tê (A. D. 1426–35) an officer, with the title of *Ying-tsao-so Ch'êng*, was appointed sole director of the works.

*Po wu yao lan*:—'In the reign of Hsüan-tê were made the tazza-shaped (*lit.* handled) or stemmed cups decorated

with red fish. Made of red precious stones from the west reduced to powder, the form of the fish emerged during the baking from the paste, and stood out in relief as brilliant as rubies. Also teapots with covers and handles, moulded in the shape of jointed bamboos, and smaller pots of novel design, such as were never seen in older times. The other pieces, like the various kinds of little artistic things for the use of the cultivated and elegant, were of perfect design and cleverly painted. There were also fabricated the white teacups, as brilliant and transparent as jade, with an extremely fine decoration engraved under the glaze, and beneath the mark of the reign also carved under the glaze, the surface of which was covered by very minute elevations like those on the skin of an orange. These cups are unrivalled even by specimens of Ting-chou porcelain, and are truly marvellous productions peculiar to this reign.'

*Nan ts'un sui pi*:—'The "sacrificial" red of the reign of Hsüan-tê was made by mixing red precious stones from the west reduced to powder with the glaze. It rose in relief because the glaze was as transparent and thick as a mass of lard, so that its surface became marked like the skin of a chicken, or the peel of an orange. The paste is composed of rich and solid material, so that the pieces do not easily crack or break. There are also good specimens among the productions of the reigns of Chêng-tê (1506–21), Hung-chih (1488–1505), Lung-ch'ing (1567–72), and Wan-li (1573–1619).'

*Ch'ing pi tsang*:—'The specimens of porcelain of the reign of Hsüan-tê are made of finely worked and thick material, with scarcely visible orange-peel markings raised on the surface. The crackled glaze of the colour of eel's-blood rivals that of the Imperial and Ju-chou porcelain of the Sung Dynasty. The pieces engraved under the glaze have extremely fine dragons and phoenixes carved in the paste, and underneath the inscription, "*Ta Ming Hsüan-tê nien chih*" (Made in the reign of Hsüan-tê of the Great Ming Dynasty).'

*Ni ku lu*:—'The jars of washed earth made for keeping crickets in during the reign of Hsüan-tê are of the most rare excellence.'

We find that this was the time when Ming porcelain attained its highest excellence. Of choice materials and select form, each piece is perfect in its painted decoration and written inscription. For painting in blue the *Su-ni-p'o* blue was used up to the reign of Ch'êng-hua, when the supply of this colour failed, so that only the common kinds of blue were available. On this account, as regards blue and white porcelain, that of Hsüan-tê ranked first.

### *Ch'êng-hua Porcelain.*

*Po wu yao lan*:—'In the porcelain of the highest class of the reign of Ch'êng-hua (A.D. 1465–87) there is nothing to excel the cups with stems, of flattened form and expanded mouth, decorated with grapes painted in enamel colours, which are more artistic than even the cups of the reign of Hsüan-tê. Next after these come the wedding cups decorated with flowers, insects, and a hen and chicken, the wine-cups with figure scenes and lotus flowers, the shallow cups with the five sacrificial utensils, the small cups with flowering plants and butterflies, the blue and white wine-cups as thin as paper, the sets of small chopstick plates painted in colours, the perfume boxes and different kinds of tiny jars, all of which are of pure artistic merit and worthy of admiration.'

Kao Tan-jên, in explanation of one of his verses on some 'chicken-cups' of Ch'êng-hua porcelain, says:—'These wine-cups of Ch'êng-hua porcelain differ in name and shape, but are all cleverly painted and carefully finished, the colours, both dark and light, alike brilliant and pure, and the fabric very strong. The "chicken-cups" are decorated above with *mutan* peonies, below with a hen and chicken instinct with life and movement.'

We find that in Ch'êng-hua porcelain the best is that painted in enamel colours, and that the best of the wine-

cups are the cups decorated with a chicken. In the time of the Emperor Shên Tsung (A.D. 1573–1619) there used to be placed on the table before the Emperor a pair of Ch'êng-hua wine-cups, which were valued at 100,000 cash, which shows the high price put upon them at this time. Former authors have discussed the relative merit of the reigns of Hsüan-tê and Ch'êng-hua. In the *Liu ch'ing jih cha* Hsüan-tê porcelain is considered equal to that of Ju-chou, Yung-lo and Ch'êng-hua being both placed lower. The *Jung ch'a li shuo,* discussing the Imperial porcelain of the Dynasty, puts Ch'êng-hua first, Hsüan-tê next, Yung-lo next, Chia-ching next. The *Po wu yao lan* concludes that for blue and white Ch'êng-hua does not equal Hsüan-tê, while in the porcelain of Hsüan-tê painted in colours, they are laid on too deeply and massed in too high relief, whereas in the Ch'êng porcelain the enamel colours, whether light or dark, are used in accordance with correct rules of art. These three authorities therefore differ in their conclusions. To sum up, it may be said that of Ming Dynasty porcelain, none excelled that of the reigns of Hsüan-tê and Ch'êng-hua, while each of these two periods had its own special points of excellence, so that we may accept the dicta of the *Po wu yao lan* as correct.

### *Chêng-tê Porcelain.*

In the beginning of the reign of Chêng-tê (A.D. 1506–21), an Imperial porcelain manufactory (*Yü ch'i ch'ang*) was established for the exclusive fabrication of Imperial ware.

*Shih wu kan chu*:—'In the reign of Chêng-tê a chief eunuch, who was then governor of the province of Yun-nan, obtained from foreign countries some Mohammedan (*Hui*) blue, of which, when melted with stone, imitation jewels were made, and which was twice the value of gold. When it was known that this could be employed in the porcelain kiln, it was used for decoration, and the colour excelled that of the older ware.'

*T'ung ya*:—'Of this Mohammedan blue the dark colour was the most valuable.'

In the reign of Hsüan-tê an official called Director of the *Ying-shan-so* was put in sole charge of the porcelain works. In the first year (A.D. 1436) of the reign of his successor, Chêng-t'ung, the office of sole director of the Imperial manufactory was abolished, it being stated in the Official Records that as soldiers had to be levied, it was resolved to stop the manufacture of porcelain in order to relieve the people. The *Yü chang ta shih chi* says that in the fifth year (A.D. 1454) of the reign of Ching-t'ai the annual amount of porcelain required to be made at Jao-chou was lessened to one third, so that in addition to the abolition of the office of director of the works, the number of things annually required was also diminished. For this reason for some twenty years after the reign of Hsüan Tsung, there is no official mention of porcelain. When the Emperor had recovered the throne in the first year of the period T'ien-shun, the year *ting-ch'ou* of the cycle (A.D. 1457), a eunuch was again sent to take charge of the work, and the Imperial porcelain manufactory re-established as before. The same *Ta shih chi* again tells us that in the twenty-second year of the reign of Ch'êng-hua (A.D. 1486), the directorship of the Jao-chou porcelain manufactory was abolished. This was the end of the reign of the Emperor Hsien Tsung, and it was doubtless in obedience to an early decree of his successor Hsiao Tsung. Hence up to the eighteenth year of this Emperor, Hsiao Tsung, there is no official mention of porcelain. The reference in this year again to the appointment of a eunuch must have been to the one who was sent, in the first year of Chêng-tê (A.D. 1506), to establish the Imperial manufactory, and take sole charge of the porcelain works. When Chia-ching succeeded to the throne (A.D. 1522), this official was again removed.

We find it recorded that at this period the Mohammedan blue was constantly pilfered by dishonest workmen, until the governor of Fou-liang invented a plan of weighing it and by this means stopped the thefts. The blue employed at this time was a mixture of the Mohammedan blue and

the native mineral blue, the proportion being ten of the former to one of the latter for the best colour, four to six for that of medium quality. During the reign of Chia-ching (A.D. 1522–66) it was used exclusively for the decoration of Imperial porcelain. The Official Records say that when the Mohammedan blue was introduced the native mineral blue was discontinued, but they are wrong.

### *Chia-ching Porcelain.*

In the first year of the reign of Chia-ching (A.D. 1522) the appointment of a eunuch was discontinued, and each one of the assistant prefects of the district was ordered to officiate in rotation as director of the manufactory. In the forty-fourth year of this reign (A.D. 1565) the Assistant Sub-Prefect of Jao-chou Fu was specially ordered to reside at the Imperial manufactory and act as director, which arrangement, however, was soon changed.

*Shih wu kan chu*:—'In the decoration of the porcelain of the reign of Chia-ching Mohammedan blue was much used. The red mineral was not to be obtained, and the processes of manufacture also were not equal to those of the previous reigns. A red colour, derived from iron crystals, was the only red that was successfully fired.'

*Po wu yao lan*:—'In the reign of Chia-ching porcelain painted in blue, as well as that decorated with enamel colours, was produced in large quantities. But the Jao-chou earth was gradually deteriorating, so that it differed widely from that of former days. The small white cups which the Emperor Shih Tsung was accustomed to use on Taoist altars were also called "altar-cups", although both in form and material they are far inferior to those of the reign of Hsüan-tê. Among other pieces of this reign, the shallow cups painted with fish, and the covered boxes for vermilion decorated with small flowers, are also worthy of notice.'

We find that in painting blue and white porcelain in the reign of Hsüan-tê a pale blue was preferred, in the reign of Chia-ching a dark blue. The Mohammedan blue gave

a deep bright colour of beautiful tint. The bright red mineral failed and this Mohammedan blue marvellously appeared in its place, a special instance of the good luck of the time. But the supply of earth at Ma-ts'ang was daily diminishing, till it was nearly exhausted, so that the quality of the paste is far inferior to that of Hsüan-tê porcelain. The best 'altar-cups' are pure white like jade, some are of a bluish tint from imperfect firing of the paste, others yellowish because made of impure earth, but these last two kinds are not worth collecting. The *T'ung ya*, when it says that 'in the reign of Chia-ching there were pure white altar cups', refers to these.

*Lung-ch'ing and Wan-li Porcelain.*

In the sixth year (A. D. 1572) of the reign of Lung-ch'ing, the manufacture of porcelain was re-established, and the different assistant prefects were again deputed to superintend it in rotation. In the beginning of the reign of Wan-li (A. D. 1573–1619) one of the Assistant Sub-Prefects of Jao-chou Fu was moved, and stationed permanently at Ching-tê Chên as Director of the Imperial Porcelain Manufactory.

*Chiang-hsi Ta Chih*:—'Formerly there used to be paid for the white earth produced at Ma-ts'ang, and at other localities within the bounds of Fou-liang Hsien, seven-hundredths of a tael of silver for every hundred catties by weight. In the eleventh year (A. D. 1583) of the reign of Wan-li, the Sub-Prefect Chang Hua-mei, seeing that the Ma-ts'ang earth was becoming exhausted, and its extraction more and more difficult, increased the price three-hundredths for each hundred catties. In the present day the earth is brought from Wu-mên-t'o. The best kind of this new earth is marked with sugar-spots.'

*Yü chang ta shih chi*:—'Some of the "furnace transformations" (*yao pien*) are extremely curious, and such as could not be produced by mortal hands. They are generally, however, purposely destroyed, and not permitted to come to light. In the reign of the Emperor

Wan-li, in his fifteenth and sixteenth years, the Emperor ordered the manufacture of large square slabs for screens, which, however, failed in the baking, one being transformed into a bed, six feet long and one foot high, fit to sleep upon, another changed into a boat three feet long, with all its fittings complete, not one missing. This was reported to the Director at Jao-chou, and all the city officials came to see them. They were afterwards broken to pieces with the hammer, as the officials dared not send them to the Emperor.'

We find that the porcelain of the Ming Dynasty daily increased in excellence, till we come to the reigns of Lung-ch'ing and Wan-li, when there was nothing that could not be produced. But the meretricious scenes depicted on porcelain of the reign of Lung-ch'ing were not worthy of artistic culture. Among the other things, those in which the glaze, transparent and thick as massed lard, rises in millet points like the skin of a chicken, or exhibits palm-eyes like the peel of an orange, are of special beauty. We are told in the *T'ung ya* that the Imperial porcelain, after the paste had been shaped, was dried for a whole year before it was finished on the polishing-wheel and made thin; and that, after it had been covered with glaze and dried, it was re-covered several times; and that, lastly, whenever the glaze was wanting in any place after the piece was taken out of the kiln, it was again polished and covered with glaze and baked anew. This shows why the glaze is as transparent and thick as massed lard, so that it does not readily chip or crack. At the private factories porcelain could not be made to equal this.

We find again that during the Ming Dynasty, there lived in the province of Kiangnan, at Yi-hsing Hsien, in the prefecture Ch'ang-chou Fu, a man named Ou, who made the porcelain called after him 'Ou Ware'. He imitated the crackles of the ancient *Ko* porcelain and the colours of the Imperial and Chün-chou productions of the Sung Dynasty. The colours employed by him were

very numerous. He fabricated flower-dishes, mirror-frames, &c., the early specimens of which are of special beauty and will be described presently.

The imitation of Ting-chou porcelain made at Jao-chou, in which the paste was composed of Ch'ing-t'ien stone reduced to powder, is called *fên-ting*[1] porcelain. It is roughly made and of rather loose texture, and not particularly valued.

## 2. Processes of Manufacture during the Ming Dynasty.

The extracts taken from different sources are arranged under separate headings, the titles of the books quoted not being specified.

### (1) *Materials and Colours.*

The *Pottery Earth* (*t'ao t'u*) was found in the district of Fou-liang, at Hsin-chêng-tu, at various places in the Ma-ts'ang Mountains, viz. Ch'ien-hu-k'êng, Lung-k'êng-mu, Kao-lu-p'o, and Ti-lu-p'o. The earth occurred in masses, with black lines radiating throughout, and it was sprinkled with spots like points of sugar. It was as translucent as white jade. The best was sprinkled with spots like stars of silver.[2] It was paid for at the rate of seven-hundredths of a tael of silver for each hundred catties. In the reign of Wan-li the pits had been dug so deep that the earth was exhausted, and new mines had to be sunk and galleries made, causing much additional labour to the people, to

[1] The *fên-ting* is so called on account of its fine white fabric, like starch-powder (*fên*), to distinguish it from the earthen *t'u-ting* ware. It is commonly called now *Chiang-t'ai'rh* (*lit.* paste-bodied) porcelain, and is much sought after by collectors on account of the fine blue and white painting with which it was decorated, especially during the reign of Kang-hsi, and the softness of the glaze, which generally becomes in process of time finely crackled. The note above, of course, refers only to the Ming Dynasty.

[2] These 'silver stars' are due to crystals of mica, derived from the decomposed granite of which the beds of kaolin are formed.

recompense which the Director, the Sub-Prefect Chang Hua-mei, added three-hundredths of an ounce of silver to the price of each hundred catties. Afterwards, when it was discovered that at Wu-mên-t'o, within the boundaries of the same district, there was a new source of earth, sprinkled with sugar spots like the Ma-ts'ang earth, and of still better quality, the earth was brought from this place. The distance was twice as far as before, yet the price was fixed at the same rate, so that there was not much brought. In the fabrication of the large dragon bowls, earth from Yü-kan and Wu-yuan was used, with powdered stone (quartz), the paste being made of these ingredients mixed with the porcelain earth.

The *Powdered Petrosilex* (*Shih mo*) came from one or two places in Hu-t'ien, and was mixed with the government clay in the fabrication of the large fish-bowls to give them strength.

The *Glaze Earth* (*Yu-t'u*) was brought from two places in Hsin-ch'êng-tu, that used for the blue and yellow glazes from Ch'ang-ling, that used for the pure white porcelain from Yi-k'êng. The mineral from both these localities was marked with veins[1] like arbor-vitae leaves. Some was also brought from T'ao-shu-mu, this last being used in the manufacture of white porcelain, as well as of that painted in blue.

*Sand* and *Yellow Clay* were used in the fabrication of the seggars. The sand was brought by outside coolies, who were paid at the rate of two-hundredths of a tael of silver for each hundred catties. The yellow clay was fetched by paid workmen sent out from the manufactory.

The source of the *Bright Red Mineral* (*Hsien hung t'u*), which used to be employed for glazing the red porcelain, is not known. The supply failed before the reigns of Chêng-tê and Chia-ching, and the firing was also not so

[1] These veins are due to the presence of dendrites, formed by a slight quantity of manganese oxide in the rock, as shown by M. Salvétat from actual specimens sent to the Sèvres Museum.

well done as before, so that they could only produce then the iron sulphate red (*fan-hung*) colour.

*Red Precious Stones from the West* (*Hsi hung pao shih*). The stem wine-cups, decorated with red fish, of porcelain of the reign of Hsüan-tê (A. D. 1426–35), were made by reducing these precious stones[1] to powder, and applying it in the form of paste. The red was described as being so bright as to dazzle the eyes.

The *Cinnabar* (*Chu sha*) glaze was employed on porcelain of the reign of Hsüan-tê, to decorate small wine-pots and large bowls, and produced a colour as red as the sun.

For painting in blue *Pi-t'ang Blue* was used, which came from the district of Lê-p'ing.[2] In the reign of Chia-ching (A. D. 1522–66), on account of serious disturbances at Lê-p'ing, the mines were closed, and *Mineral Blue* (*Shih-tzŭ Ch'ing*) was then used instead. This was obtained from several places in Jui-chou.[3]

*Su-ni-p'o Blue.* This was used in the decoration of blue and white porcelain of the reign of Hsüan-tê, and afterwards up to the reign of Ch'êng-hua (A. D. 1465–87), when the supply failed.

*Mohammedan Blue* (*Hui Ch'ing*). During the reign of Chêng-tê (A. D. 1506-21), a chief eunuch, officiating as governor of the province of Yun-nan, first imported this[4]

[1] The Chinese imagine that rubies were powdered to mix with the glaze, but this is impossible, as their colour would disappear when heated in the furnace. The colour is due doubtless to a copper silicate, and the mineral imported would be the native copper protoxide. The Chinese now in imitating these cups use a powder scraped from oxidized copper vessels. The same substance is used for painting under the glaze of pieces decorated in blue and maroon, to produce the last colour. The iron sulphate red, on the contrary, is applied over the glaze, and fixed by the less intense heat of the muffle stove.

[2] Lê-p'ing Hsien, in the prefecture Jao-chou Fu.

[3] Jui-chou Fu, in the same province of Kiangsi.

[4] The blue and white porcelain is distinguished for the depth and brilliance of its blue, and the Mohammedan colour used in its production must be cobalt blue. *Ta Ch'ing* (*lit.* 'Great Blue') is given by writers of the Ming Dynasty as a synonym of *Hui Ch'ing*, and

from foreign countries. It was used in the decoration of the Imperial porcelain of the next reign of Chia-ching. Afterwards this also could no longer be got.

*Hei chê shih*[1] came from Hsin-chien in Lu-ling. It was also called *Wu ming tzŭ*. It was used in painting decorations upon porcelain.

### (2) *The Government Workmen.*

In the Imperial Porcelain Manufactory there were twenty-three Departments, viz.:—

1. The Large Bowl Factory.
2. The Wine Cup Factory.
3. The Plate Factory.
4. The Large Round Dish Factory.
5. The Tea Cup Factory.
6. The Mark or Seal Department.
7. The Department for Engraving Dragons.
8. The Department for Sketching Designs.
9. The Department for Writing.
10. The Department for Colouring.
11. The Seggar Factory.
12. The Paste Factory.
13. The Carpenter's Shop for large work.
14. The Carpenter's Shop for small work.
15. The Boat Builder's Shop.
16. The Blacksmith's Shop.
17. The Bamboo Workshop.
18. The Varnishing Shop.
19. The Rope Factory.
20. The Barrel Factory.
21. The Painter's Shop.
22. The Eastern Pounding Mills.
23. The Western Pounding Mills.

this is the name under which cobalt blue is imported in the present day, for decorating porcelain and cloisonné enamels on copper, as well as for colouring glass.

[1] This name of 'black-red mineral' must be one of the many synonyms of the native cobaltiferous ore of manganese.

During the two reigns of Chêng-te and Chia-ching the government workmen constantly employed in the Imperial manufactory numbered over 300. Besides these there were the artists for the painted decoration, who were specially remunerated, painting being such a difficult art.

The porcelain-earth workmen, and the workers in sand and clay (who made the seggars), were hired when their services were required. Superior workmen were requisitioned from the head-men of each thousand households, in the seven district cities of Jao-chou, taken in rotation, who were also required to provide their rations.

### (3) *Materials used in the Manufacture of Porcelain.*

The *Mohammedan Blue*, which when broken with a hammer exhibited cinnabar-red points, was called '*First-class Blue*', that which had silver stars being called '*Medium Blue*'. Every catty (sixteen ounces) of the raw material yielded three ounces of blue. After the blue had been crushed and the larger pieces picked out, the remnants and fine powder were treated with water, holding in suspension magnetic iron ore, to draw out the impurities which sank with it to the bottom. From each sixteen ounces by means of this process another five- or six-tenths of an ounce of true blue could be extracted.

Chu Hsien, when Governor of Fou-liang, wishing to put a stop to the pilfering of the Mohammedan blue by the workmen, divided some of the material among three men, giving one catty to each, which they crushed in the presence of the officials, pounded and macerated in water. He ordered the amount of blue obtained by each of the men to be weighed, and, if either of them produced one-tenth of an ounce above the fixed weight, he was to be rewarded with silver. The quantities obtained by the three men were compared, and the average of the greater and lesser amounts taken, by which means the proper yield of the blue was calculated.

If the Mohammedan blue was used alone, the colour

spread beyond the proper bounds. If the native mineral blue (*shih ch'ing*) was added in excess, the colour came out heavy and dull. The addition of one-tenth part of an ounce of native mineral blue to each ounce of the Mohammedan blue composed the first quality blue. In the proportion of four to six, they made the blue of medium quality, and when this last was painted on, the strokes of the brush came out neat and clearly defined. When the blue of the first quality was mixed with water, it produced a pure and brilliant colour (for painting the ground).

The *Glaze Colour* (*Yu sê*—Céladon) was composed of pea-green glaze with water, purified ashes (of lime and ferns), and yellow earth mixed together.

The *Brown Gold Colour* (*Tzŭ chin sê*)[1] was composed of liquid glaze, purified ashes, and the brown gold mineral, mixed together.

The *Turquoise Colour* (*Ts'ui sê*) was composed of verdigris prepared from old copper with water added, and saltpetre, mixed together.

The *Yellow Colour* (*Huang sê*) was composed of 16 ounces of prepared lead oxide, and $1\frac{1}{5}$ ounces of pulverized native peroxide of iron, mixed together.

The *Golden*[2] *Green Colour* (*Chin lü sê*) was composed of 16 ounces of purified lead oxide, $1\frac{2}{5}$ ounces of verdigris, and 6 ounces of pulverized quartz, mixed together.

The *Gold*[2] *Blue Colour* (*Chin ch'ing sê*) was composed of calcined cobalt 16 ounces, mixed with 1 ounce of native mineral blue.

The *Iron-Sulphate Red Colour* (*Fan hung sê*) was composed of calcined copperas mixed with white lead, in the

[1] This is a gold-brown or coffee-coloured glaze corresponding to the *fond laque* of French ceramists. The mineral used was probably a ferruginous clay.

[2] I do not understand the use of *chin* (gold) in these two names. Perhaps it may mean bright or clear. Julien renders the second '*émail couleur de bronze*' with a note of interrogation, but the prescription given could produce nothing but blue.

proportions of 1 ounce and 5 ounces, incorporated with Canton glue.

The *Brown or Claret Colour* (*Tzŭ sê*) was composed of 16 ounces of lead oxide, 1 ounce of native mineral blue, and 6 ounces of powdered quartz, mixed together.

The *Pale Blue* (*Chiao ch'ing*) was composed of liquid glaze, purified ashes, and native mineral blue, mixed together.

The *Pure White* (*Ch'un pai*) was composed of a mixture of liquid glaze and purified ashes (of lime and ferns).

The *Sacrificial Red* (*Chi hung*) cups were glazed with red precious stones from the West reduced to powder. There were also other kinds of cups decorated with a cinnabar-red glaze, with turquoise enamel, with blue designs, and painted in enamel colours made at this period. If the glaze was laid on very thickly, it rose in tubercles like the skin of an orange.

When the porcelain was washed with water holding in suspension the ashes of nettle-hemp, the yellow colour became reddish. If the paste was washed with clay mixed with water before it was baked, and then steeped in a decoction of sesamum stalks, the colour of the glaze became purplish.[1]

### (4) *Painting and Colouring.*

For painting in blue, the artists were collected each day at dawn and at noon, and the colour for painting was distributed among them. Two men of good character were first selected, the larger pieces of porcelain being given to one, the smaller pieces to the other, and when they had finished their painting, the amount of the material used was calculated before the things were taken to the furnace to be baked. If the result was satisfactory, then pieces were given as models to the other painters, and in

[1] This paragraph is quoted from the dictionary *Chêng tzŭ t'ung*, and is generally characterized as nonsense, the author having no special knowledge of porcelain.

the rest of the pieces painted, the quantity of the colour used and the depth of the tint was required to be in exact accordance with these models.

The mineral *hei chê shih*, when ground with water and painted on the paste, was at first colourless, and it was only after baking that it became transformed into a sky-blue. This was commonly called painting in furnace blue.

Among the *Painted Designs* were the following: decorating wine-cups of porcelain of the reign of Ch'êng-hua (A. D. 1465–87): 'The flaming silver candle lighting up red beauty' (a stanza of a poet of the T'ang Dynasty), illustrated by a beautiful damsel holding a candle to light up the pink flowers of the double crab-apple. 'Brocade pattern medallions', being medallions of flower-sprays and fruit on each of the four sides. 'The famous scholars'—Chou Mao-shu depicted on one side admiring the lotus, Ta'o Yuan-ming on the other opposite his favourite flower, the chrysanthemum. 'Little children' ('*Wa-wa*')—five small boys playing together. Others were painted with dragons and phoenixes, fish and water-weeds, flowers and plants, single and double gourds, the eight lucky emblems of Buddhist lore, the sacred lotus of India. Of all of these different designs we have specimens in collections.

We have many *Names of Designs* in a list, specially drawn up in the eighth year of the reign of the Emperor Chia-ching (A. D. 1529), to be given to the artists hired for the occasion. These designs included:—Dragons in pursuit of pearls, gold-weighing scales, playing boys, sporting dragons rising and descending, phoenixes flying through flowers, floral scrolls covering the whole ground, birds flying in the clouds, the myriad year Wistaria, dragons grasping pearls, the Polyporus fungus (*ling-chih*) supporting the eight precious things (gold, pearl, coral, &c.), the eight immortals (of Taoist legend) crossing the sea, flying birds and *mutan* peonies, lions playing with embroidered balls, medallion scrolls of fairy flowers, the four fish *ch'ing*, *p'o*, *li*, and *kuei* with water-weeds, the eight heroes of Chiang-hsia, waterfalls of the Pa Shan (mountains in

the province of Ssŭ-ch'uan), flying lions, waves and flames supporting the eight mystic diagrams (*pa kua*), leafy bamboo and longevity fungus, storks flying in clouds surrounded by floral scrolls, floral designs with dragons and phoenixes, encircling sprays of lotus supporting the eight mystic diagrams and the eight lucky Buddhist symbols, hoary dragons emerging from the sea holding up the eight mystic diagrams, the three genii (in the guise of Confucius, Lao Tzŭ, and Buddha) concocting the elixir vitae, children playing different games, the emblematic flowers of the four seasons (the plum of winter, peony of spring, lotus of summer, chrysanthemum of autumn), three goats, the punning emblem of reviving springtide (*san yang k'ai tai*), celestial flowers and scrolls with the legend *Yun shan fu hai* (Cloud mountains and sea of happiness), the two Taoist genii (Ch'uan-tao and Ho-ho), dragons emerging from the water enveloped in clouds, dragons piercing scrolls of Indian lotus flowers, phoenixes flying through flowers, pairs of dragons enveloped in clouds, blue interlacing sprays of fairy flowers, dragons surrounded by flowers, *ju-i* sceptre medallions, pairs of male and female phoenixes flying through flowers, male and female phoenixes and dragons coiled in medallions, the group of eight Taoist immortals worshipping the god of longevity, hoary lions and dragons, the effigy of Pao-lao (carried in procession by boys at the New Year), phoenixes rising into clouds of propitious omen, symbols of heaven, earth, and the six points of the compass, dragons copied from ancient bronzes, the fir, bamboo, and blossoming plum, male and female phoenixes flying through fairy flowers, and through flowers of the four seasons. But in a short summary like this it is impossible to give a complete list of all the different designs.

### (5) *Engraving, Embossing, and Decorating in the Five Colours.*

In the decoration of porcelain in relief, the white paste was worked on with the brush, so as to produce different

embossed forms, such as dragons, phoenixes, flowers, and plants, and it was then covered with the glaze composed of quartz, chalk, and fern-ashes, and finally baked in the kiln.

To engrave porcelain, the different kinds of pieces, before being put into the kiln, were carved with the iron graving-tool into various designs, such as dragons, phoenixes, flowers, and plants, then covered with the glaze composed of quartz, chalk, and fern-ashes, and finally baked.

Decoration in gold was painted upon white porcelain which had been previously fired, the gold being painted on with a brush, after which the piece had to be re-baked in the colour stove. When used in combination with iron-red, the pieces required firing twice in the muffle stove. When other colours were not painted on, it was entirely yellow.

To fix gold designs upon bowls, the gold was rubbed down with large garlic-bulbs, before the decoration was painted. The porcelain was then re-fired, and the gold would never come off.

To paint porcelain in the five colours, pieces of pure white colour previously baked were decorated in colours, and then fired a second time in the muffle stove.

### (6) *Fabrication of the Seggars.*

The seggars were made of yellow clay and sand mixed together, and worked into different sizes as required.

The Seggar Furnace, setting aside the large seggars for the dragon fish-bowls, was able to bake from seventy to eighty pieces large and small at each firing. Each firing was estimated to require fifty-five loads of fuel. Some of these cases were spoiled after once using, others could be used again before they were destroyed. In the furnace the large seggars were baked in six tiers, the largest and second sizes, both rings and covers, while one stick of incense was burned, the smaller cases being piled at the side. The seggars of the third size were

the smallest, and required the burning of two sticks of incense, while they were piled up in the same way, and they required one-tenth more fuel to be added to the above quantity. A gentle fire was kept up during three days and nights, a fierce fire for the last twenty-four hours. Three days after the fire had burnt itself out the furnace was opened.

### (7) *Charging the Furnace.*

The porcelain before being put into the furnace was carefully examined, above, below, and in every corner, to see that there were no defects. If the paste was found to be perfect in texture and finish, the pieces were put in, the seggars covered, the furnace sealed up, and the fire lighted.

The furnace was 6 feet broad in front, 6½ feet broad at the back, and also 6 feet long. It had a round roof. It held only one case of the large dragon fish-bowls, and of the larger and second sized vases, two cases of the third sized pieces. A raised platform was built inside the furnace.

The blue furnace was a little smaller than the above, being 5 feet broad in front, 5½ feet broad behind, and 4½ feet long. Its charge consisted of over 200 round dishes or plates of average size, or of 156 of larger size, of 24 large bowls, of 30 bowls one foot in diameter, of 16 or 17 large jars, or of between 500 and 600 small wine-cups.

### (8) *Time of Firing.*

For the dragon-bowl furnace a gentle fire was kept up for seven days and nights, what was called a 'flowing fire', because, like dripping water, it went on gently but continuously, and was just kept alight, that was all. This abstracted the water and solidified the paste, and gradually developed the decoration. After this a fierce fire was kept burning for another two days and nights. When the seggars were red and passing into a white heat,

uniformly bright both in front and behind, the fire was stopped and the apertures by which the fuel was thrown in were closed. It was necessary to wait two more days before the furnace could be opened. Each firing required altogether about 120 loads of wood, one-tenth more if the weather were rainy or cloudy.

For the blue furnace a gentle fire was kept up for two days, a fierce fire for twenty-four hours. When the fire had the colour described above, it was stopped and the apertures closed up. This furnace cooled more easily, so that the porcelain could be taken out after five days. Each firing consumed some sixty loads of fuel, two-tenths more if the pieces of porcelain were large. If there had been rain, and the furnace were damp, another two-tenths of fuel were required. In autumn, when the days were sunny and dry, it was found unnecessary to increase the allowance of fuel even for large pieces.

Among the workmen engaged in the six different kinds of furnaces, those in the blast furnace had the hardest labour. For the first days when the fire was gentle only ordinary care was required, and there was no extra strain, but during the two days when the fire had to be pressed, fuel had to be thrown in constantly both by day and night, and the fire kept up without being allowed to rise or fall, so that it became neither too hot nor too cool. This duty permitted neither rest nor sleep, the brain had to be kept alert, or the colours would not be properly developed. Were the fire allowed to flame too much, or on the other hand to become smoky, the porcelain would be broken and cracked, or covered with yellow stains.

# BOOK IV

## DESCRIPTION OF SPECIMENS. PART I.

### 1. Specimens of T'ang and Yü.[1]

*Fou.*

According to the *Lü shih Ch'un ch'iu* the 'Emperor Yao ordered Chih to cover a *fou* with deer-skin, and strike it like a drum.'

This *fou* was used for drawing water, and as a drinking-vessel, and it was to be utilized in addition for leading music. The Emperor Yao ordered it to be covered with deer-skin, the term *lo* used here meaning undressed skin, the skin of a deer being tied over the orifice of the vessel. The idea was to improve upon the older drum, which was made entirely of earthenware. This *fou* is different from the musical cups of later times, which were called by the same name, and were struck on the rim with a chopstick. The *Fêng su t'ung* says that the *fou* was an earthenware vessel, which the natives of the Ch'in State used to beat upon to accompany songs. It is recorded in the *Shih Chi* that when the Princes of the States of Chao and Ch'in met at Mien-ch'ih, the Prince of Ch'in, exhilarated with wine, ordered the Prince of Chao to play on the lute, whereupon Ning Hsiang-ju offered a *fou* to the Prince of Ch'in, and begged him to play upon it first. We gather from this that playing upon the *fou* was an ancient custom of the men of the Ch'in State. But it was not peculiar to the Ch'in, for we see in the ancient *Odes of Ch'ên* 'How you beat your

[1] Yao of T'ang and Shun of Yü are the two legendary Emperors with which the Book of Annals begins. The latter died according to the official chronology in 2206 B.C., and was succeeded by the Great Yü, the founder of the Hsia, the first of the Three Ancient Dynasties.

earthen vessel' (Legge's *Shih Ching*, I. xii. 1). The practice had gradually spread, after the Emperor Yao had first invented the *fou* for playing upon. The *Shan t'ang k'ao so* says that the *fou*, like an upturned flower-pot, an ancient musical instrument of the Western Jung, was played upon with four sticks, which shows another way of playing upon the *fou*.

*Earthen Liu* (*also written kuei*).

*Earthen Hsing* (*written with or without radical t'u*, '*earth*').

*Han Tz'ŭ*:—'The Emperors Yao and Shun ate out of earthen *liu*, and drank from earthen *hsing*.' Ju Ch'un defines *hsing* as a food-vessel. The dictionary *Kuang ya* gives *liu* as an earthenware food-vessel.

*Han shih wai chuan*:—'The Emperor Shun ate out of earthen *kuei*, and drank from earthen *hsing*.'

We find in the *K'ao kung chi* that the moulders (*fang jên*) made the *kuei*. These vessels, which were made of pottery, were called by this name, probably from their resemblance in shape to the sacrificial dishes made of bamboo. The name must be of later application, the original name being *liu*. The character *kuei* is written under the radical *chu*, '*bamboo*', showing that it was originally a bamboo vessel. The *hsing* written without the radical is a contracted form of this character. The mould of a vessel is called *hsing*. It is equivalent to another form meaning '*finished*'. Once finished it cannot be changed, an idea conveyed also in the modern *mu*, '*mould*'. Drinking out of earthen *hsing* is an affair of no great moment, and moulds of vessels even might have then been used for drinking.

*T'ai tsun.*

The Book of Rites *Li Chi* in the section *Ming t'ang wei* gives the *T'ai tsun* as wine-jars (*tsun*) of the Emperor Shun (Yu Yü Shih). The Commentator says that these *T'ai* were made of earthenware.

We find that, according to the *Shih pên*, Yi-ti was the first man to make wine. Chao Chi in his *Commentary* upon the works of Mencius says that Yi-ti made wine, which the Emperor Yü drank and liked, although he afterwards dismissed Yi-ti, and hated strong wine; so that this Yi-ti lived in the time of Yü of Hsia. But the Emperor Shun of Yü had already made the *T'ai* wine-jars, and used to support the aged with meat and wine, as may be seen described in the section *Wang chih* of the 'Book of Rites'; so that it is clear that wine could not have been invented by Yi-ti.

*Wu, T'ai, and Wa kuan.*

*K'ao kung chi*:—'The Emperor Shun (*Yu Yü shih*) highly esteemed pottery.' The Commentator says that Shun was very simple in his tastes, and valued pottery, adducing the sacrificial wine-vessels *wu* and *t'ai* and the earthenware coffins *wa kuan* as examples.

The *Wu* and *T'ai* are described below among the specimens of the Chou Dynasty.

We find in the *T'an kung* the earthenware coffins of the Emperor Shun mentioned, the Commentator in which says that originally faggots were not used, as the ancient annals record that Shun made earthenware coffins, and earthen *chi*, for the *chi-chou* of the Sovereigns of the House of Hsia also originated with Shun. The *Chi yen* says that it was recorded in the Annals, that in the fifth year (A. D. 506) of the period T'ien-chien, there was discovered to the south of the Tan-yang Shan an earthenware object, five feet high and four feet round, pointed above and level below, like a round box with a cover. Shên Yo said: 'This is a *yen-yü*, the corpse was buried inside in a sitting posture. It is the same as the *chi-chou* of the Sovereigns of the House of Hsia mentioned in the *T'an kung*'. Chêng, however, commenting on the same passage, explains *chi* to mean baked with fire, the earth being baked and moulded round the coffin. This would give

a very different result. The object found was doubtless really one of the ancient earthenware coffins of the time of the Emperor Shun.

*Tsêng p'ên.*

*Han shih wai chuan*:—'The cooking-vessels (*tsêng p'ên*) of the time of the Emperor Shun had no diaphragm'. The *Commentary* says: 'The diaphragm is the screen (colander) of the modern cooking-vessel, which holds the rice, allowing the steam to penetrate so as to cook it thoroughly. It is called "diaphragm" after the same structure in the human body'.

We find in the *K'ao kung chi* that the Potters made the *yen*, which are described in the *Commentary* as cooking-vessels (*tsêng*) without bottom. It has been recorded that in the reign of T'ai Tsung (A. D. 627–49) of the T'ang Dynasty, a native of Ch'ang-an discovered a *yen*, which was in the form of a three-legged round caldron below, and like a square vessel, *tsêng*, above, a copper screen being inserted in the middle, which could be removed. It had no bottom, which was the reason why the copper screen had to be put in. The cooking-vessels of the time of Shun had also no bottom, and yet no screen was inserted, so that they are said above to have had no diaphragm.

Again, in the *Yen pei tsa chih* we are told of the discovery of an ancient pottery vessel, which was attributed by some to the date of the Emperor Shun. The *T'ung ya* discussing the statement of an author of the Sung Dynasty that 'there had been found in the ground, in the province of Honan, a plain moulded wine-cup not covered with glaze, of the pottery ware of the Emperor Shun', says that the time of this Sovereign of the House of Yü was so far distant from the present day, that this was hardly credible. Wu Tzŭ-hsing argued that, when the Emperor of the Ch'in Dynasty had cast all the metal figures, he employed the workmen to weld clay and make pottery, of which this might be a relic—a far-fetched and improbable theory.

## 2. Specimens of the Chou Dynasty.[1]

### *Wa Fang* (*Earthenware vessels*).

The *Illustrations of Ritual Ceremonies* state that 'in the Worship of Heaven earthenware vessels were employed.'

We find in the Section *Chiao tê shêng* of the Classic of Rites that the sacrificial vessels used were of pottery and gourds, but it is not specified what were the vessels. The above *Ritual Illustrations* also use the term earthenware vessels in a general sense to indicate only that they were moulded by the Potters. It is recorded in the *Shan t'ang k'ao so* that in the Worship of Heaven during the Chou Dynasty, the Sovereign poured into the libation cup (*chüeh*), made of gourd-skin, fragrant wine out of the earthenware vase (*wa fu*), and sacrificed with it. This vase is one of the sacrificial vessels. The ritual vessels also included square wooden dishes (*kuei*), and earthenware *kuei*, round wooden tazza-shaped dishes (*tou*), and earthenware *tou*. The Commentators generally agree that the vessels, used in sacrificing to Heaven and to Earth, were preferred to be plain. With regard to those of the Ancestral Temple, wood was the material used. All the ritual vessels that were made of earthenware would be included in the above category of *wa fang*.

### *T'ai Tsun.*

*Chou Li*:—'The officer called Director of the Wine-jars and Dishes (*Ssŭ Tsun Yi*) attended to the arrangement of the six wine-jars (*tsun*), and the six sacrificial dishes (*yi*). In the ceremonial worship of the four seasons, in sacrifices to ancestors, in court banquets, and in court receptions, the two *T'ai* wine-jars were used.'

[1] The Chou Dynasty began in 1122 B.C., the thirteenth year of Wu Wang, dating from his accession to the principality of Chou. It lasted under a succession of thirty-four sovereigns till 256 B.C., when Nan Wang surrendered his dominions to the ruler of Ch'in, the builder of the Great Wall.

*Shan t'ang k'ao so*:—'The *T'ai* wine-jar held 5 *tou*, had a round mouth 1 foot in diameter, a stem 3 inches high. This jar was 9 inches in diameter at the middle, the largest diameter of 12 inches being below the neck, and 8 inches in diameter at the base. The interior from above to below measured 10½ inches. It was half an inch thick, the bottom, which was level, being 1 inch thick. There were two *T'ai* jars, one filled with strong spirit, the other with undistilled wine.'

### *Ta Lei* (*Wine Jars*).

*Chou Li*:—'The officer called *Ch'ang jên*, at every sacrifice on the altars of the land, used the large wine-jars called *ta lei*.' The Commentator describes these earthenware jars as of plain make. The Moulders made the sacrificial dishes, called *kuei* from their external form; and these jars, which were also fashioned of earthenware, derived their name from the simplicity of their form.

### *Earthenware Fu. Fou. Hu.* (*Wine-vessels of different form.*)

*Li Chi* (The Ritual Classic) in the Section on Ritual Vessels says:—'The wine-jars used by the Sovereign were earthenware *fu*, outside the gate were placed the vessels called *fou*, inside the gate the vessels *hu*.' The *Commentary* gives the capacity of the *fu* to be 5 *tou*, the *hu* being larger and holding 1 *tan*, the size of the *hu* being unknown. The small vessels were preferred, the smaller being placed near, the larger farther off; and as the *fou* were outside the gate we may conclude that they were larger in size than the *hu*.

*Shan t'ang k'ao so*:—'The wine-jars called *t'ai tsun*, and those called *fu*, were of the same make, form, and capacity.'

These earthenware *fu* seem to have been the wine-jars (*tsun*) of the Emperor Shun of Yü. The *fou* and *hu* were also both vessels for holding wine. Kuo in his *Commentary*

on the ancient dictionary *Erh ya* says that the *fou* was a kind of bowl (*p'ên*). The *K'ao kung chi* records the capacity of the *p'ên* to be 2 *fu*, the *fu* being 4 *ch'ü*, equivalent to 6 *tou* and 4 *shêng*; and that the *fou* was larger than the *hu*. Again, in the *Yi Ching* (the Classic of Divination) under the *k'an* hexagram, the fourth line, divided according to the reading of the Commentator Wang Pi, who breaks the sentence into three paragraphs (*Tsun chiu, kuei êrh, yung fou*), indicates 'One jar of wine and two dishes of rice in vessels of earthenware, taken as a scanty allowance, passed in through the window.' So he considers both the wine-jar and dish to be vessels of earthenware (*wa fou*).

*Wa T'ai* (*Earthenware T'ai*).

The Decorum Ritual *Yi Li*, in the Section *Yen Li*, says:—'The wine-jars (*tsun*) of the Prince were called earthenware *t'ai*, of which there were two kept well filled.' The Commentator explains these earthenware jars to be identical with the wine-jars (*tsun*) of Shun the Sovereign of Yü.

*Wêng* (*Ovoid Jars*).

*Chou Li*:—'The *Hsi* officer prepared for the table of the Sovereign 60 jars (*wêng*) of sauce (*hsi*), and prepared for the entertainment of guests 50 jars. The *Hai* officer prepared for the Sovereign's table 60 jars of pickles (*hai*) made of sliced vegetables, and 50 jars for the entertainment of guests. The *Shan* officer, when he cooked the food for the table of the Sovereign, used altogether 120 jars of pickles (*chiang*)', this term, as explained by the *Commentary*, being a general one, including the two kinds (*hsi* and *hai*), mentioned above.

*Shan t'ang k'ao so*:—'The jars called *wêng* were 1 foot high and held 3 *tou*; the mouth was 6½ inches across, the body 9½ inches, the bottom 6½ inches in diameter, with a slight constriction below the body, where the diameter was 6 inches.'.

*The Yen, P'ên, Tsêng, Li, and Yü.*

*K'ao kung chi*:—'The Potters (working with the wheel) make the *yen*, which hold 2 *fu*, and are half an inch thick, with a lip of 1 inch; the *p'ên*, which hold 2 *fu*, and are half an inch thick, with lip of 1 inch; the *tsêng*, which hold 2 *fu*, are half an inch thick, with lip of 1 inch, and perforated with seven holes; the *li*, which hold 5 *hu*, and are half an inch thick, with lip of 1 inch; and the *yü*, which hold 2 *hu*, and are half an inch thick, with lip of 1 inch.' The *Commentary* explains that the *fu* was a measure of 6 *tou* 4 *shêng*. The Commentator Chêng Ssŭ-nung says that the *yen* was a *tsêng* without bottom, and that the *hu* was a measure of 3 *tou*. Yuan says that the *tou* filled three times made 1 *hu*. Therefore the *hu* was equivalent to 1 *tou* 2 *shêng*, and its third part, the *tou*, was consequently equivalent to 4 *shêng*.

*Erh ya*:—'The *tsêng* is a kind of boiler (*hsün*), also called *to*.' The *Commentary* explains that it was called *to* in the province of Liang-chou.

We find that the *yen* were made by the Potters under the regulations of the Chou Dynasty. The *Po ku t'u* figures several bronze *yen*, with bodies in the form of gluttonous ogres, ornamented with leaf-scroll designs, with cloud-scrolls and spiral frets, some with horizontal ears, others with upright ears, with beautifully carved designs, several of them with a written inscription inside, among which inscriptions we find '*Fu Chi*', '*Fu Yi*', and '*Tsu Chi*'. Looking through the other ancient vessels (in this Collection), we find tripod boilers (*ting*) with the inscriptions '*Fu Yi*', '*Fu Chia*', '*Fu Ting*', '*Tsu Wu*'; sacrificial dishes (*yi*) with the inscriptions '*Fu Kuei*', '*Tsu Yi*', '*Fu Yi*', '*Fu Ting*', '*Fu Chi*', '*Fu Hsing*', '*Mu Yi*'; libation-cups (*chüo*) with the inscriptions '*Fu Ting*', '*Tsu Hsin*', '*Fu Kuei*', '*Fu Hsin*', '*Fu Wu*', '*Tsu Chi*'; wine-jars (*yu*) with the inscriptions '*Fu Chia*', '*Tsu Kuei*', '*Fu Chi*'; a wine-pot with handle and spout (*yi*) inscribed '*Tsu Wu*'; a wine-vessel with lip (*ho*)

inscribed '*Fu Ting*'; and a beaker (*ku*) inscribed '*Fu Kêng*'. All these are bronze vessels of the Shang Dynasty, and consequently the *yen* with similar inscriptions figured in the *Po ku t'u* must also belong to the Shang Dynasty. The Chou Dynasty preferred elaborate ornament, the Shang Dynasty plainness, so that a specimen with much carved decoration should not be attributed to the Shang, nor one entirely plain to the Chou Dynasty. The *Po ku t'u* contains also caldrons (*li*) of the Shang Dynasty with the inscriptions '*Ting Fu*', '*Fu Chi*', '*Fu Wu*' similar to those on the above *yen*. Perhaps the Potters also carved ornamental designs on their productions, although there is no clear record. Again, in the *Tso Chuan* it is recorded that the Prince of Ch'i sent to the Prince of Chin a *chi-yen*, which is explained to mean a jade cooking-vessel (*tsêng*), which shows that these *yen* were also made of jade. Certainly ancient vessels were not all made of one material.

Again, the *Ch'i yung chih kuei* says that the *tsêng* was a vessel to cook food in, and that the ancient *tsêng* was an earthenware vessel made by the Potters. In the ancient dictionary *Erh ya*, *tsêng* is written under the two radicals *wa* (earthenware), and *li* (caldron). The dictionary *Shuo wên* has four different radicals, *wa* (earthenware), *fou* (pottery), *li* (caldron), and *li* (boiler), each at the head of its derivatives. The last two radicals are synonymous. The vessels *hsün* and *fu* are put under the third of these radicals, while *hsün* occurs also under the fourth. *Tsêng* also occurs under both headings. The caldron (*li*) was without doubt a cooking-vessel. The *Po ku t'u* describes the *yen* as a vessel, the upper portion of which, shaped like a *tsêng*, could be used for steaming food, while the lower portion, in the form of a three-legged caldron (*li*), was available for stewing, this one vessel combining the uses of the *tsêng* and *li*.

Chêng K'ang-ch'êng, commenting on the description of the Worship of the Aged Women, says that the vases (*p'ing*) and bowls (*p'ên*) were both cooking-utensils, so that these

bowls (*p'en*) were also used in cooking. Consequently, all these things fabricated by the Potters were cooking-vessels. But how about the last in the list—the *yü*? These *yü* were supposed to be measures, confounded with the *tsêng*, *yen*, *p'ên* and *li*, without regard to their proper use. In the *Commentary on the Tso Chuan*, Tu, relying on the modern text of the *Yi Li* Ritual, makes the *yü* a measure of 16 *tou*. In the *K'ao kung chi* the Potters made the *yü*; the Moulders are described later as making the *tou*, which when filled three times made a *hu*, so that the *hu* was equivalent to 1 *tou* 2 *shêng*. The *yü*, which held 2 *hu*, was therefore equal to 2 *tou* 4 *sheng*. These things fabricated by the Potters must really have been earthenware vessels, like the ovoid jars (*wêng*), and not measures.

### *The Kuei and Tou.*

*K'ao kung chi*:—'The Moulders (*Fang-jên*) make the *kuei*, which hold 1 *hu*, are 1 foot high, half an inch thick, with a lip of 1 inch; and the *tou*, three of which in capacity equal 1 *hu*, and which are 1 foot high.'

These *kuei* and *tou* of the Moulders must have been ritual vessels. The *Erh ya* says that a wooden *tou* was called '*tou*', a bamboo *tou*, '*pien*', an earthenware *tou*, '*têng*'. The *têng* defined to mean a candlestick is not the same as the *tou* of the Moulders, as will be seen presently. The *T'ung ya* includes among ancient vessels *tou*, with the inscriptions '*Tsu Kuei*', '*Chi Huan*', so that there were also bronze *tou* among the old sacrificial vessels. The *Shan t'ang k'ao so* says that, although under the heading of the Moulders there is no word of *fu*, the *fu* and *kuei* were inseparable things, and that therefore these must also have been fabricated by the Moulders. But he gives no reference to the Classics, and one dares not thus produce at random the name of *fu*, and add it arbitrarily to the *kuei* and *tou*, so I only just allude to this statement.

*Têng.*

*Erh ya*:—'An earthenware *tou* is called *têng*', which the Commentator Kuo explains to signify a candlestick.

We find in the ancient Elegies *Ch'u Tz'ŭ* a stanza reading 'Bright lights of fragrant fat scattered about on carved candlesticks'; the name *têng* used being explained by the Commentator to be the same as *ting*. Hsü Hsüan says that it got the name of *têng* from the fact of the candle being stuck *upright* in the pricket-candlestick. In the *Po ku t'u* a candlestick is figured with the inscription 'Bronze rainbow candlestick of the Wang family', and the line of the poet Li Ho 'At early dawn the rainbow looks green behind the screen' is taken from this simile. In another verse of the T'ang Dynasty the expression 'silver rainbow' is used. The character *têng* was at first written as it appears above, without a radical at the side; but when, later, candlesticks were made of copper, the radical *chin* (metal) was prefixed. The common modern form is written with the radical *huo* (fire). The ancients must have had some utensil for holding candles, so that Kuo's explanation of candlestick may be accepted. The later simile of 'copper rainbow' was derived from the carved pricket-candlesticks of bronze, which were a development of the earthenware *têng*.

*T'ai and Nieh.*

*Erh ya*:—'An *ou-pu* is called *t'ai*.' The *Commentary* explains that the *pu-lu* was a small jar (*ying*) which was called *t'ai* in the province of Ch'ang-sha. Again: 'A *k'ang-hu* is called *nieh*', which is said by the Commentator to be a bottle-shaped vase.

We find in the *Po ku t'u* several bronze *pu* figured. There is a square oblique *pu*, without inscription, decorated with artistic carving, in the form of lightning scrolls on the shoulder, of scroll-like lines derived from thunder round the body, and between the shoulder and neck engraved in curved lines like rings of silk or hair, with tubercles like mammillae scattered over its surface, and the figure of

a yellow eye in the centre. A *fish pu* without inscription is also figured there, ornamented with the figure of a fish between the shoulder and body, a *lizard pu*, decorated with a lizard, and four *t'ao-t'ieh pu*, with gluttonous ogres. Some of these last have also scroll decorations from elaborately designed moulds. The character *pu* is written with radical *wa* (earthenware) and the *ou-pu* of the *Erh ya* was one of the productions of the Potters. The wine-jars called *shan-lei* were carved of wood, according to the Commentator Chêng Yuan, with ornamental mountain and cloud designs. Pottery vessels of the period were also in all probability ornamented with carved designs although there is no reference in the books.

*Chi Fou.*

*Yi Ching* under the hexagram *Pi*:—'If the heart be willing the vessel (*fou*) will be full': the *Commentary* explaining that the *fou* was the vessel used in drawing water from a well.

*Tso Chuan*:—'With ropes and buckets (*fou*) and water-vessels all provided.'

*Ch'ieh Hu.*

The *Chou Li*, under the duties of the *Ch'ieh-hu* officer, says that this officer had charge of the drinking-vessels and looked for wells for the army. The Commentator Chêng Ssŭ-nung explains these *hu* to be vessels for holding drinking-water.

*P'ing.*

*Tso Chuan*:—'Although you may know all the rules for drawing water, it is of no avail if the people refuse to lend their vessels.'

*Li Chi* (The Book of Rites) in the Section on Ritual Vessels says:—'When the god *Ao* is worshipped by the aged women, they fill the bowls (*p'ên*), and use the vases (*p'ing*) as sacrificial vessels.'

We find in the *Shuo wên* the *hu* defined as a *k'un-wu*

round vessel. The Commentator on the Book of Rites explains the *hu* to be a measure of 1 *tan*, originally a drinking-vessel. The *fou*, which used to be placed outside the gate, and the *hu*, inside the gate, were used not only for drinking, but also for drawing water. The *Ch'ieh-hu* officer of the Chou Dynasty, who looked after the wells, was the same officer who is described in the *Tso Chuan* as providing ropes and buckets. The *fou*, *hu* and *p'ing* were similar vessels, differing only in size, the *hu* being smaller than the *fou*, the *p'ing* still smaller than the *fou*. According to the *Fang yen* the *fou* was called *pu* and *jung*, when small *p'ing* and *ying*. In the *Shuo wên*, *ying* is defined as a long-necked *p'ing* provided against fire, the *p'ing* being a jar (*wêng*), usually written with radical *fou* (pottery), but there being also another form with radical *wa* (earthenware), both of which are read alike. The dictionary *Yü p'ien* gives the same two forms of the word but reads them under different tones, defining each one as a vessel for drawing water. The vessels being identical, what is the use of different tones? so we must follow the *Shuo wên* as more correct. In the Worship of the Aged Women the *p'ing*, which they used as sacrificial vessels, were doubtless these *ying*, described as provided against fire, which is why the Commentator says that what were originally only cooking-utensils became afterwards used as wine-vessels. In the Annals of the T'ang Dynasty it is recorded in the Biography of Li Ta-yao, that the Emperor T'ai Tsung (A. D. 627–49) gave him a foreign vase (*p'ing*), saying: 'Although this is not worth a thousand ingots of silver, it has been used by Us every day.' The *Chêng yao* writes *hu*-shaped vase instead of foreign (*hu*) vase. The *T'ung chien shih wên* annotates 'a vessel for drawing water', but this error is corrected by Hu San-hsing, who calls it 'a wine vessel'. The Emperor T'ai Tsung said that it had been used by Himself, and it is evident therefore that it could not have been a vessel for drawing water. The *Hsien yi pien* says that a wine-pitcher was then still called *hu-p'ing*.

*The Jar of Confucius* (*Pottery of the State of Lu*).

In the *Biography of Chung-li Yi* we read:—'Yi, when he was Minister of the State of Lu, repaired the sepulchral temple of Confucius, and found a jar (*wêng*) on the path. He sent for the guardian of the temple and asked him, "What jar is this?" He answered: "The jar of Confucius, as is written on the back. Since the death of Confucius no one has dared to open it." Yi opened it and discovered inside written tablets.'

*Watering Jar* (*Kuan Wêng*) (*Pottery of the State of Chu*).

*Chung Tzŭ*:—'When Tzŭ Kung went to the State of Ch'u, as he was crossing Han-yin he saw an old man in a vegetable garden, digging out water-channels, and pouring water from a jar which he held in his hands.'

*Wine Vessel* (*Ching-ch'êng*) (*Pottery of the State of Ch'i*).

*Han shih wai chuan*:—'Huan Kung, Prince of the State of Ch'i (683–642 B. C.), when he was entertaining with wine the officers of his court, made it a rule that the last should be fined a *ching-ch'êng*.' The *Commentary* explains that a large wine-vessel was called *ching-ch'êng*.

*Earthenware Cup* (*Wa Chih*) (*Pottery of the State of Han*).

*Han Fei Tzŭ*:—'T'ang Hsi-kung said to Chao Hou, Ruler of the Han State: "There are here a cup of white jade with no bottom, and a cup of earthenware with bottom, which will His Majesty choose?" He replied: "I will take the earthenware cup."'

We see that it is not stated what kind of wine-vessel this *ching-ch'êng* of the State of Ch'i really was. The *Hou ching lu* says that 'among vessels of pottery there are the wine *ching* which the natives of Chin-an fill with wine. They are like the earthenware vases called *hu* in shape, with a small neck, round mouth and capacious body. Whenever a dinner is sent as a present to a person,

vessels of wine are sent at the same time, with the written message of 1 *ching*, or 2 *ching* and so on up to 5 *ching* of wine.' The *ching-ch'êng* of the Prince of Ch'i must have been like one of these vessels. Ying Shao, commenting on the Annals of the Han Dynasty, says that the *chih*, which was a ceremonial cup for drinking wine, was in ancient times made of horn. We gather from the above quotation from the writings of Han Fei that in his time (third century B. C.) there were also *chih* (wine-cups) made of earthenware, which are referred to again later on. In the *Fang yen* we find the names of many and varied vessels of the period of the Separate States given, but their form is not mentioned, so that only one or two can be exactly determined, and it is necessary to wait for further research.

Pottery dates from the Three Ancient Dynasties, and it is that which is constantly referred to under the name of *p'i* ware. The *Pi hêng* says that all the specimens discovered in modern times are entirely plain, very thick, and not decorated with any coloured glaze.

### 3. Specimens of the Han Dynasty.[1]

*Fragrant Wine Vessels* (*Kuei Chiu Tsun*).

*Sacrificial Wine Vessels* (*T'ai Tsun*).

For the Choral Worship of Heaven, described in the Annals of the Han Dynasty:—'On the day selected a jar (*tsun*) of *olea fragrans* wine was provided for libations to the eight points of the compass.' Chin Cho says in the *Commentary* that the jar used was the *t'ai tsun*. In the reign of Yuan Ti (48–33 B. C.) the Minister of State, Li Yuan-chi, ordered the *olea fragrans* to be steeped in

[1] The Han Dynasty ruled from 206 B. C. to A. D. 220. Most writers, following M. Julien, place the invention of true porcelain during this period, but, as I have tried to show in the Introduction, the grounds on which the argument is based are hardly sufficient.

water to make the wine for the sacrificial vessels *t'ai tsun*. Again, in the Worship of the Twelve Auspicious Constellations, 'strong wine of a hundred powders was provided, and the wine-jars *t'ai tsun* were filled with fragrant spirits'.

We find in the Ritual of the Chou Dynasty six sacrificial wine-jars, of which the *t'ai tsun* were used in the Ancestral Temple, and at the Royal Receptions of the Four Seasons. In the Worship of Heaven and Earth it is only said that the vessels were made of pottery and gourds, and there is no clear reference in the Classical Books to the use of the *t'ai tsun* at this. In the Choral Worship of Heaven in the Han Dynasty, and in the Worship of the Auspicious Constellations, the *t'ai tsun* are mentioned; in the Worship of Heaven the fragrant wine-jars are named. Although the Commentator says that these were also *t'ai tsun*, yet they are given by different names, and I have in consequence placed each of the two under its own heading, calling the second 'Fragrant Wine Vessel'.

### *Bowls* (*Yü*).

In the Biography of Tung-fang So we find: 'He put a lizard under a bowl (*yü*).' The *Commentary* explains this *yü* as an eating-vessel like the *po* but larger, the same as the modern *po-yü*.

We find in the *P'ai shih lei pien* this *po* described as originally an Indian (*T'ien-chu kuo*) vessel, the full name of which was *po-to-lo* (Sanscrit, *pâtra*), and that this was first introduced into China during the Chin or Sung Dynasty. The *Yen fan lu*, arguing from the *Commentary* of the Han Annals, which says that it was 'like the *po* but larger, the same as the modern *po-yü*', infers that the name existed in ancient times, and that the two characters used were synonymous. Another Commentator declares this statement to be baseless, it being clear that it was not an ancient vessel, so that the definition of the *P'ai shih lei pien* must be accepted as correct. But the *Kuang yün* defines the *fou* also as 'an earthenware vessel, a *po*', agreeing

with the Commentator of the Han Annals, a clear modern explanation of antiquity.

*K'ang-hu.*

Chia Yi[1] in his Epitaph upon Ch'ü Yuan says: 'The bronze tripod of the Chou Dynasty was thrown away and the *k'ang-hu* prized.'

*Pien, Ou and Ch'ui.*

*Huai Nan Tzŭ*:—'Those who plant the polygonum in rows, put ornamental borders on earthenware bowls and dishes (*pien*, *ou*), weigh the firewood before burning it, and count the grains of rice before cooking it, are fit only to attend to petty things, not to have the management of large affairs.' Again:—'Dogs and pigs do not choose their bowls and platters.' Again:—'Carry the pitcher (*ch'ui*) to draw water.'

*Pu.*

In the Biography of Yang Hsiung[2] it is written:—'He used to say he feared that his successors would use his writings to cover sauce jars (*pu*) with.'

*Kang.*

The *Shih chi*, in the Book on Commodities, mentions 'a thousand jars (*kang*) of pickles and sauces.'

[1] Chia Yi, a celebrated scholar appointed privy councillor to Wên Ti of the Han Dynasty, 179 B.C. Ch'ü Yuan, privy councillor to Prince Huai of the State of Ch'u in the fourth century B.C., was unjustly accused, and drowned himself, after putting his sorrows into verse in the famous elegy *Li Sao*, on the fifth day of the fifth moon, a day still celebrated in his honour throughout Southern China by the annual feast of dragon-boats.

[2] This Biography is included in the Annals of the Han Dynasty. Yang Hsiung, who lived 53 B.C.–A.D. 18, was a philosopher and founder of a school of ethics. Having held office under the Emperor Chêng Ti and his successors, he accepted the post of Minister to the usurper Wang Mang, for which he is severely blamed by the historians.

*Tan.*

In the Biography of K'uai T'ung[1] we read: 'He was presented with a *tan* and *shih*.' The Commentator says that the natives of the State of Ch'i called a small jar (*wêng*) a *tan*, which held 2 *hu*.

According to the *Commentary* on the Annals of the Han Dynasty, the saucer (*ti*) of an earthenware bowl (*p'ên*) was called *k'ang-hu*. The *Erh ya* says that a *k'ang-hu* was called *nieh*, explained by the Commentator to be a vase (*hu*). The dictionary *Shih wên* says that this character in the *Pi ts'ang* has the radical *wa* (earthenware) affixed; in the *Tzŭ lin*, it is written with another phonetic and read *huang*. The *Shuo wên* defines *huang* as a broken vase (*ying*). The *Fang yen* says that the *pu-lou* was a vase (*ying*), called *kang* in Ling-kuei. The *Yü pien* defines *kang* as a large jar (*wêng*). These words *huang*, *k'ang*, *kang* are all varieties of the same sound and apply to the same object.

The *Shuo wên* defines *ou* as a small bowl (*p'ên*), *pien* as like a small round jar (*pu*) but with a larger mouth and flatter, used for holding food. The *Fang yen* says that *nieh* were called *ang*, and to the west of the Pass, in the province of Shensi, *p'ên*, the smaller ones being called *shêng*, *ou*, and *pien*. It also says that *pien* were called *t'i* in the States of Ch'ên, Wei, Sung and Ch'u, the large ones being distinguished as *ou*. To the present day, natives of the Ho-pei region call small bowls *t'i-tzŭ*. Therefore the *ou* and *pien* were both small bowls (*p'ên*), the *pien* being of smaller size than the *ou*.

*Ch'ui*, which is written differently in the *Shuo wen*, is defined there as a small-mouthed vase (*ying*). In *Lieh Tzŭ* we find the expression 'shaped like a *tan-ch'ui*'. The *Kuo ts'ê* refers to 'pickle *hu* and sauce *ch'ui*'. The *ch'ui* was of the same form as the modern ovoid jar called *wêng*,

[1] A politician of the beginning of the Han, and counsellor of Han Hsin, created Prince of Ch'i in 203 B. C.

made with a small mouth, so as to be carried to draw water without spilling it.

The *pu* was also a small vase (*ying*). The *kang* is defined in the *Shuo wên* as a kind of long-necked vase (*ying*) holding 10 shêng, this character being written also with radical *fou* (pottery). A pitcher (*p'ing*) with a long neck is said, in the *Fang yen*, to have been called *ying*, and it adds that at Lo the Capital of the Chou, and in the States of Han and Chêng, this was called a *ch'ui*, while to the north-east of the Ch'i State, and along the sea-coast, the same vessel was called *tan*.

Therefore we see that the *ch'ui*, *pu*, *kang* and *tan* were all small-mouthed vases (*ying*), being, according to the *T'ung ya*, what are now commonly called *t'an* and *ch'êng*. In this last book the largest jars (*kang*) are written under the radical *wa* (earthenware), the smaller under the radical *fou* (pottery), but in modern usage the last character is applied to the largest jars.

### *Chan.*

*Ch'ih pei ou t'an*:—'Sung Li-shang, the Tao-t'ai, has in his collection two porcelain cups (*chan*) of the Han Dynasty, decorated inside with fish and water-plants, which he says that a labourer, a native of Ch'in-chou, discovered in the ancient tomb of Wei Hsiao[1].'

These cups (*chan*) come under the category of drinking-vessels. The character is also written with radical *yu* (wine). The cups (*chan*) of the ancient Hsia Dynasty were made of carved jade, which is why the original form of the character is written with radical *yü* (jade). It was also written with radical *chüeh* (horn). The common modern form has *min* (vessel) as radical. All these different forms are equivalent. During the T'ang Dynasty (A. D. 618–906) cups were made of ruddy gold, white jade, engraved silver, rock-crystal, and glass, beautifully carved and designed for

[1] An insurgent leader who maintained for some years an independent sovereignty in Western China till his death in A. D. 33.

drinking wine. When we come to the Sung Dynasty (A. D. 960–1279) we find these cups (*chan*) made of porcelain, the material most highly esteemed at the tea-tasting parties of the period.

*Lac-black Earthenware Dish* (*P'an*).

*Hsiu fu shan ling ku shih* (*Antiquities of the Tombs on Hsiu-fu Shan*):—'In the tomb of the Empress Tao, Consort of Wu Ti (140–85 B. C.), there was found one lac-black earthenware dish.'

In the *Chou Li*, under the 'Director of the Jade Treasury', we find:—'When the Princes are assembled, he prepares the round dish (*p'an*) ornamented with pearls.' This is the earliest mention of the *p'an*, which was also written under the radical *mu* (wood). The *Shuo wên* defines the *p'an* as a 'dish for holding things'. Chung Shan Wang in a verse on wood-carving refers to its being 'made into dishes and cups'. *P'an* is also written with another phonetic of the same sound as in the *Ku yo fu*: 'I send a jade dish of medicines'. The three different characters are identical. In antique script it is written with radical *chin* (metal), which referred, according to the dictionary *Chi yün*, to a bronze utensil like the modern saucer.

*An-tsai.*

The *T'ai p'ing yü lan* contains the inscription on the plate (*an-tsai*) of Li Yu:—'May this well-named *an-tsai* be filled with delicate food! It is cleverly worked in clay, finished by the skill of the potter.'

The dictionary *T'ung ya* gives three different forms of the word *tsai*. The *Shuo wên* defines it as a 'utensil for holding food' and writes it in a complicated form, compounded of three characters. Shên Chih quotes this form as occurring in the inscription upon the Stone Drums[1] of

[1] Containing inscriptions of the ninth century B. C. See Paper by S. W. Bushell in the *Journal of the North China Branch of the Royal Asiatic Society*, Vol. VIII, 1873.

the Chou Dynasty: '*tsai hsi tsai pei*' 'to the west and to the north', where it is borrowed to signify 'placed'. The character used above in *an-tsai* is similarly a borrowed one, used instead of the proper one for 'plate', given in the old dictionaries. The legend inscribed says 'worked in clay by the skill of the potter', which shows clearly that it must have been a specimen of pottery.

### 4. Specimens of the Wei Dynasty (A. D. 220–64).

*Pottery Vessels (T'ao Tsun).*

In the Description of Rites in the 'Annals of the Chin Dynasty' it is recorded that in 'the first year (A. D. 237) of the period Ching-ch'u, when Lo-yang was rebuilt, there was erected in the south of the city, upon the Wei-su Hill, the Round Altar for the Worship of Heaven. On the day of worship the ancient Emperor Shun was associated as the First Ancestor of the Dynasty. Upon the altar were placed dishes of uncooked fish, and undistilled wine in pottery vessels.'

We have seen above that in the Worship of Heaven during the Han Dynasty the wine-jars called *t'ai tsun* were used. Here we have only 'pottery jars' mentioned, referring to the material of which the wine-vessels were made, instead of to their form (*t'ai*).

### 5. Specimens of the Chin Dynasty (A. D. 265–419).

*Green Porcelain (P'iao Tz'ŭ).*

The Odes of P'an Yo contain the stanzas:—'Pull off the yellow skin and offer the sweet (orange). Fill up the green porcelain (*p'iao tz'ŭ*) and present the fragrant (wine).'

Tso Ssŭ in explanation of his 'Ode upon the Capital of Shu' (the modern Ssŭ-ch'uan) says that the bright tint of distant well-wooded mountains was called *p'iao*. The *Shuo wên* defines *p'iao* as the pale bright green colour of

silk-stuffs[1]. P'an Yo applies the same term *p'iao* to porcelain, which shows that at this period light green was the colour the most highly valued. The names applied in later times to porcelain of 'bright green of the hills' and 'sky blue' took their origin from this particular kind.

*Tea Cups (Ch'uan Ch'i) of Eastern Ou.*

Tu Yü in his 'Verses upon Tea' says:—'Select cups of fine porcelain, from the factories of Eastern Ou.'

We find that this poet Tu Yü says:—'Select cups of fine porcelain', which shows that, in his time, the manufacture was not confined to one locality, as he refers to the finest. Ou was in the Yueh territory, and this is the first allusion to the porcelain of Yueh-chou, which was already becoming celebrated.

## 6. Specimens of the Southern and Northern Dynasties (A. D. 420–580).

*Crane Cup Jars (Ho Shang Ying).*

*Lo-yang Chia-lan Chi*:—'Liu Pai-to, a native of the province of Ho-tung, was celebrated for his manufacture of wine. The jars filled by him with wine were exposed during the sixth month of the year to the sun for ten days, so as to fix the flavour of the wine. It was a fragrant wine, and pleasant to the palate, and the court officials used to send presents of it to places a thousand *li* distant, under the name of "Crane Cups."'

*Chün-ch'ih.*

*Chi kuei chuan*:—'The *Chün-ch'ih* are of two kinds,

[1] So *p'iao* is defined in *Williams' Dictionary* as 'blue or greenish silk'. One of the poets quoted presently writes—'Bring the *p'iao*-coloured, green (*lü*) porcelain cups'—so that the tint of the glaze appears to have been green rather than blue. I have referred to the ambiguity of the colour *ch'ing* in the Introduction. Here the question is of purely literary interest, as no examples of the porcelain of these early times seem to have survived.

those made of porcelain and earthenware for clean purposes, those made of copper and iron for unclean use.'

*Hsi wu yi ming su*:—'In the Sanscrit language *chün-ch'ih*, written phonetically in two different ways, means vase (*p'ing*).'

We find in the *Hsi Yü chi* that the washing-vase is given as *chün-ch'ih-ka*[1], so that the name *chün-ch'ih* must be a corruption of this, the third syllable *ka* being omitted. The Buddhists use it for washing the hands, which is why it is called 'washing-vase'. They also call it 'cleansing-vase.' The *Tz'ŭ lin hai ts'o* says that Mongolians call this cleansing-vase in their tongue '*yang-ê*'.

The Buddhist religion, which was introduced into China during the Eastern Han Dynasty, flourished most under the Six Northern and Southern Dynasties, and therefore the above extract is appended here.

## 7. Specimens of the Sui Dynasty (A. D. 581–617).

### *Green Porcelain Glass* (*Lü Tz'ŭ Liu-li*).

In the Biography of Ho Ch'ou in the 'Annals of the Sui Dynasty' we read:—'Ch'ou had a wide knowledge of old pictures, and was a great connoisseur of antiquities. In his time the art of glass-making had been long lost in China, and the workmen did not venture even to attempt it. Ch'ou made some of green porcelain, which could not be distinguished from the real thing.'

We find that *liu-li* was formerly brought from the countries of Huang-chih, Ssŭ-t'iao and Jih-nan. It was produced in Ta-ch'in of ten different colours, pink, white, black, yellow, blue, green, purple, sky-blue, red, and brown. This *liu-li* was originally a natural production. Yen Shih-ku, commenting upon the 'Annals of the Han Dynasty', says that 'in his day the common method of manufacture was to melt the stones with the addition

[1] A phonetic transcription of *kuṇḍikâ*, the Sanscrit name for the water-vase of the Buddhist mendicant.

of certain chemicals, to pour out the liquid, and to shape the pieces, but they proved to be unsubstantial, fragile, and not durable'. During the Northern Wei Dynasty 'the art of moulding it was learned from a native of the Ta Yueh-ti country who came in the reign of the Emperor T'ai Wu (A. D. 424–51) to the Capital as a trader, and said that he knew how to mould stones and make glass (*liu-li*). He afterwards collected the ore and made glass, and when finished it surpassed the real thing both in brilliance and in colouring'. The art has been handed down from this time to the present day, and was probably only partially lost under the Sui Dynasty. But all that moulded in China is fragile, and comes to pieces in the hand when hot wine is poured in. It is a great pity that only the Yueh-ti method has been handed down, while the art of Ch'ou has been lost. The word *liu-li* in the Records of Western Countries in the 'Annals of the Han Dynasty' is written with two different characters, but of the same sound as those used above.[1]

[1] The earliest mention of glass in China seems to be in the 'History of the Han Dynasty', which says that the Emperor Wu Ti sent envoys across the sea to buy glass (*liu-li*). The name is contracted from *pi-liu-li*, a transcription of the Sanscrit *vâidûrya*. Of the countries mentioned in the text, Jih-nan corresponded to the modern Cochin China, Ta-ch'in to the Roman Empire (cf. Hirth's *China and the Roman Orient*), Ta Yueh-ti to the Massagetae, who in the fifth century were in possession of Afghanistan.

# BOOK V

## DESCRIPTION OF SPECIMENS (CONTINUED).

### 8. Specimens of the T'ang Dynasty (A. D. 618–906).

*The Wine Vessels (T'ai Tsun).*

*T'ang liu tien*:—'There are altogether fourteen different kinds of wine-jars (*tsun*) and sacrificial dishes (*yi*), which are displayed during worship, the first of which are those called *T'ai tsun.*'

*Li Yo Chih*[1]:—'There were set out during the Worship of the Supreme Deity (Shang Ti) two *t'ai tsun*, which were placed upon the south-east corner of the altar: during the Worship of the Five Ancient Emperors, and of the Sun and Moon, the two *t'ai tsun* were displayed in the front rank: in the Ancestral Temple the two *t'ai tsun* stood upon the floor of the Hall of Worship. When offerings of cooked food were set out before the Supreme Deity, these wine-vessels were filled with clear wine: for the Emperors of the Centre and Four Quarters, also worshipped on the Round Altar, they were filled with clear wine: for the Sun and Moon they were filled with red wine, but when these were sacrificed to upon the Round Altar, also with clear wine: for the Earth Deity, who was worshipped upon the Square Altar, the two *t'ai tsun* were filled with clear wine: during the ceremonial offerings in the Ancestral Temple they were filled with thick wine.'

We find that the *t'ai tsun* were used during the Chou Dynasty in the Ancestral Temple, in the Han Dynasty they were employed in the Worship of Heaven, and we have written authority for both. In the T'ang Dynasty

[1] *Description of Rites and Music*, forming Books xxv–xl of the 'History of the T'ang Dynasty'.

they were used both in the Worship of Heaven and in the Ancestral Temple. The pottery vessels used during the Chou Dynasty in the Worship of Heaven and Earth were in all probability the *t'ai tsun*, giving thus a precedent for their subsequent use.

*Porcelain Presented to the Emperor* (*Chin Tz'ŭ*).

In the collected works of Liu Liu-chou there is a memorial written by him for a man who was going to offer some porcelain to the Emperor, in which he says:—'Endowed with the high power of the furnace, it is free from fault or crack: Annealed by the joint forces of heaven and earth, it will long retain its strength: the tone is not that of an earthen pot, the form is derived from an artistic mould.'

This memorial mentions neither the particular porcelain referred to, nor the name of the man who presented it. In the time of the T'ang Dynasty there were several manufactories of porcelain, although the Geographical Records in the Annals mention only one place as furnishing a supply of porcelain for the Emperor, the province of Honan. The territories of Honan and Ho-tung are contiguous, and it is not impossible therefore that it was for one of the annual consignments from Honan that Liu-chou composed the memorial on behalf of the person concerned.

*The Brown Porcelain Bowl* (*Tzŭ Tz'ŭ P'ên*). *Sent as a Tribute from P'o-hai.*

*Tu yang tsa pien*:—'In the first year of the period Hui-ch'ang (A. D. 841), P'o-hai offered as tribute to the Emperor a brown porcelain bowl, of the capacity of half a *hu*[1], translucent both inside and outside, of a pure brown colour, half an inch thick, but as light as swan's-down.'

[1] The *hu* is a measure equivalent to about six gallons.

The 'Annals of the T'ang Dynasty' describes P'o-hai as originally the country of the Su-mo-ho, who were subject to Kao-li (Korea). The porcelain fabricated by them must therefore in all probability have been similar to the Korean. How is it, then, that in the later accounts of Korean porcelain there is no mention of such a transparent and light kind? We find again in the 'Annals of the T'ang Dynasty', that it was in the first year of the period Pao-ying (A. D. 762), that the decree was issued by the Emperor which constituted P'o-hai a State. It comprised five chief cities (*ching*), fifteen *fu*, and sixty-two *chou*, and its distance from the Capital of China[1] was stated to be 8,000 *li*. The arrival or non-arrival of tributary missions is not alluded to by the annalists, so that it is not known whether it remained subject or when it rebelled, and the notice quoted from the *Tu yang tsa pien* will supply an omission in the national history.

### *Yueh-chou Bowls* (*Yueh Wan*).

*Ch'a ching* by Lu Yü:—'For Bowls Hsing is not equal to Yueh. The Yueh-chou bowls have the edge of the upper rim straight and not everted, the foot expanded below. They are shallow and hold half a *shêng*[2]. They have been described above under 'Yueh-chou Porcelain.'

### *Nui-ch'iu White Porcelain Bowls.*

*Kuo shih p'u*:—'The white porcelain bowls of Nui-ch'iu, and the brown ink-stones of Tuan-hsi, are prized throughout the world by all, both of high and low degree.'

### *Ta-yi Porcelain Bowls.*

The works of Tu Kung-pu contain a verse begging for some bowls of Ta-yi porcelain from Wei Ch'u:—'The porcelain from the Ta-yi kilns is light and yet strong. It

[1] Hsi-an Fu, in the province of Shensi, was the capital at this time. P'o-hai corresponded more or less to the modern Manchuria, stretching from the Amour River to the Gulf of Liaotung.

[2] The *shêng* is a measure of about a pint.

gives out a low jade note when struck, and is famed throughout the city. Your Excellency has white bowls surpassing hoar-frost and snow. Pray be gracious to me and send some to my poor mat-shed.'

The *Shuo wên* defines *wan* as a small bowl (*yü*). There is another form of the word written with radical *mu* (wood). The Commentator on the Biography of the Prince of Huai-nan, in the 'Annals of the Han Dynasty', explains the term 'food-vessels' as including the different kinds of cups (*pei*) and bowls (*wan*). Yang Shêng-an, following Liu Shao-yin of the Sung Dynasty, writes *wan* with a different phonetic, under the same radical *mu* (wood), defining it as an ancient form of the character. So does Chang P'ing-tzŭ in a reference to bowls of green jade. Compare the local dialect of Nanking. The *Shu yao lu* relates that 'Yuan Tsai had in his house bowls made of sulphur for cold things, cool porcelain bowls to hold hot things'. Porcelain bowls were widely distributed abroad from the time of the T'ang Dynasty. Nui-ch'iu at this time was a dependency of Hsing-chou. So the *Kuo shih p'u* quoted above means that these Hsing-chou bowls were prized throughout the empire. Ta-yi was dependent on Ch'iung-chou. The porcelain produced there was white and strong, though light, and when struck gave out a good clear tone, and so Tu Kung-pu in his Verses puts it in the first rank for porcelain bowls. The *Ch'a ching* does not class these bowls among any of the inferior kinds, but only cites them as not equal to the Yueh-chou bowls. Why is this? In the *Ko ku yao lun* we are told that men in ancient times when they drank tea used *pieh*, because they were easily drained, so as to leave no dregs behind. The *Ch'a ching* describes the Yueh-chou bowls as having a straight upper rim and expanding foot and as being shallow, which is exactly the shape of the *pieh*. It describes them also as like jade, and as like ice, and as being of a green colour most suitable for bringing out the tint of the tea; and mentions the Hsing-chou bowls as inferior in these particular points only.

During the Sung Dynasty they preferred the cups (*chan*) covered with a glaze mottled like a hare's fur for the tea-tasting competitions. The character *ch'a* (tea) does not occur in any of the Nine Classical Books, and former authors, when referring to tea, generally say that it first came into vogue during the Chin and Sung Dynasties (third and fourth cent. A. D.). But the *Yen Tzŭ Ch'un ch'iu* mentions *ming-ch'a* as used for food. In the lives of Wang Pao and T'ung Yo of the Han Dynasty there are allusions to selling tea, and in the Biography of Wei Yao, given in the 'Records of the Wu Dynasty', it is recorded that the Emperor Sun Hao gave him a present of tea, for him to take instead of wine. These are all anterior to the Chin Dynasty.

The *Shuo wên* defines *t'u* as bitter tea, the same as the modern *ch'a ch'uan*. *Chia* is another name for bitter tea, as we see also in the *Erh ya*, where Kuo says in his *Commentary* that the early gathering was called *t'u*, and that the late gathering, *ming*, also called *ch'uan*, was known as bitter *t'u* among the natives of the province of Ssŭ-ch'uan. The *Ch'a ching* says the tea of sweet taste was called *chia*, that not sweet but bitter *ch'uan*, that which though bitter in the mouth was sweet in the throat *ch'a*. So precisely were the different kinds of tea distinguished. Detailed rules were laid down for every step, from the gathering, the preparation and the storing of the crop up to the boiling of the water for the infusion. The different kinds of water were classified as first-class, medium, and inferior; some required to be boiled only once over the fire, others twice, others three times, to bring the boiling water to its full perfection; if thin, there must be no scum, if thick, no sediment, and it was preferred when the bubbles came up light and small. The most minute directions were given to make a careful choice. The utensils employed were also carefully selected, and only adopted after repeated trials, nothing being taken at random.

*Green Porcelain Cups* (*Lü Tz'ŭ Pei*).

In a Verse of Chi Nan-chin we find the lines:—'Listen to the wind among the firs and the sound of the waterfall! Call quickly for green porcelain cups of bright glossy colour!'

We find in the *Fang yen* several words, *ya*, *ha*, *chang*, and *mo*, all meaning cup (*pei*). These cups were called *ya* within the States of Ch'in and Chin; to the East of the Pass, in the States of Chao and Wei, cups were called *ch'i* or *chan* or *wan*, the largest in size being called *ha*. In the States of Wu and Yueh they were called *chang*, in Ch'i and P'ing-yuan *mo*. The term *pei* was universal and included all the above. The characters *pei* and *ch'üan* occur both in the works of Mencius and in the Book of Rites, so that these are both old words. These cups were used by men of ancient times as wine-vessels. Chi Nan-chin in his Verses alludes to them as used for tasting tea, and probably the teacups (*ch'a chung*) of later times originated from these.

*Porcelain Jars* (*Tz'ŭ Ying*).

*Old Earthenware Pots* (*Lao Wa P'ên*).

Verses of Tu Kung-pu:—'The porcelain jar has no support, make a bowl of jade.' Again:—'Laugh not at a countryman's old earthenware pots. They have been filled with wine for generations of sons and grandsons. Pouring from silver vessels into cups of jade only dazzles the eyes. So let us drink merrily together and sleep beneath the bamboos.'

*Saucers* (*Chan-t'o*).

*Yen fan lu.* 'The saucers called *t'ai-chan* were modelled after the *chan-t'o*. These last saucers were invented in the T'ang Dynasty. Ts'ui Ning, a native of Ssŭ-ch'uan Province, a Minister of State, had a daughter who disliked when she drank tea having her hand burned by the hot

cup, and made a platter of melted wax with a ring in the centre of the size of the bottom of the cup, so that when the cup was put inside, it stood upright without falling. The workmen were afterwards ordered to reproduce this in lacquer, and Ning, pleased with the form of these saucers, called them *t'o*.'

We find in the 'Ritual of the Chou Dynasty' that the sacrificial bronze dishes *yi* were placed upon *chou*, and Chêng Ssŭ-nung tells us that these *chou* were supports placed beneath the sacrificial vessels, similar to the saucers of his own time. Therefore the practice of using saucers may be traced back to the Chou, and was already well known during the Han Dynasty. The *T'ung ya* says that the *li-sê* were platters made after the pattern of the wax rings; but Huang Po-ssŭ adds that these may be seen in pictures by artists of the Northern Ch'i Dynasty (sixth cent. A. D.). Therefore the statement in the *Yen fan lu* that saucers were invented during the T'ang Dynasty, and that in the *Ko ku yao lun* that there were no saucers in ancient times, are both wrong. Probably it was the saucer for porcelain cups which was invented by the daughter of the Minister Ts'ui Ning.

T'ao Ku[1] says that 'Liu Chang had carved fish saucers', referring to saucers made for wine-cups in the shape of fish. There were also tea-bowls clothed in silk, according to the *Tzŭ hsia lu*, which says that at the beginning of the period Chên-yuan (A. D. 785), at Ch'ing-chün oiled silk was cut into the shape of leaves to clothe tea-bowls. This was another peculiar invention.

### *Musical Cups (Ou) of Yueh-chou and Hsing-chou Porcelain.*

*Yo fu tsa lu*:—'In the first year of the Ta-chung period (A. D. 847) of the T'ang Dynasty, one of the officers appointed to compose the music was Kuo Tao-yuan,

[1] A writer of the tenth century. Author of a miscellany called '*Ch'ing yi lu*'.

Governor of Ta-hsing Hsien (the modern Peking). He was skilled in the art of playing upon musical cups, and used twelve cups of Yueh-chou and Hsing-chou porcelain, the tones of which surpassed those of the hanging musical stones of jade.

9. Specimens of the Five Dynasties (A. D. 907–59).

*The Eight Musical Cups* (*Fou*).

*Kan chu*:—'The eight musical cups called *fou* were like water-cups (*chan*). The set of eight was arranged upon the table to be played upon. They were made by Ssŭ-ma T'ao of the After T'ang Dynasty (A. D. 923–35).'

The art of playing upon musical cups was widely in vogue during the T'ang Dynasty. They used to put a greater or less quantity of water into each cup, and to produce in this way a higher or lower note. Practice in music and a good ear were required. Cups were chosen of close texture and pure sound, not like those for drinking tea or helping wine, but by testing the good or bad fabric of each by actual manipulation. The *Wên wei chi* contains some verses by the Scholar Kuo (the above Kuo Tao-yuan) upon musical cups. There was another Scholar of the time, named Ma, who excelled in this accomplishment, and built a 'Musical Cup Tower'. An ode of Chang Shu refers to Pu Fei-yen, a concubine of Wu Kung-yeh, as celebrated for her skill in this art, for which see also the Biography of Fei-yen. The original idea was taken from the pottery drums of ancient times, and at first twelve cups were used to produce the musical scale. It was merely a modification of these twelve cups, that Ssu-ma T'ao of the After T'ang Dynasty made in his set of eight musical cups, which he used to arrange upon the table to play upon. This comparatively new art of playing upon musical cups must not be confounded with the ancient custom of playing upon the pottery drum invented by the Emperor Shun. Yang Shêng-an says that the modern water-cups started from these cups.

*Porcelain Ink-Pallets* (*T'ao Yen*).

Mi Yuan-chang in his *History of Ink-pallets* (*Yen Shih*) says that 'Ch'ên Wên-hsi had in his collection a porcelain ink-pallet and cover of the time of Wang Yen of the Anterior Shu Dynasty (A. D. 891–925). The cover was surmounted by a phoenix seated upon a tower. The other parts were carved with different flowers and plants, ornamented with gilding and red lacquer. There was an inscription upon it reading *Phoenix Tower* (*Fêng-huang T'ai*)'.

Former authors discussing ink-pallets say that the best were of fine smooth texture endowed with the property of attracting the ink, and that for these qualities the stone from the mines at Tuan-chou was most esteemed. The *Shê* stone attracts the ink but it is rarely fine or smooth. Those made of washed clay are fine and smooth, but they absorb the ink with difficulty. The porcelain pallets are still inferior to those of fine earthenware. In ancient times pallets were made of jade, of rock-crystal, and of the five metals, but these must be ranked yet lower.

The above book says in another place that 'there was preserved at Hang-chou, in the Buddhist Temple Lung-hua Ssŭ, a porcelain ink-pallet of Fu Ta-fu, a former minister of the Liang Dynasty, of very large size and of the colour of camel's-hair felt. It was hollowed out in the middle in the form of a caldron, encircled by water like the round moat of the Imperial Classic Hall, decorated at the bottom with wave designs. Near the base, and on the part where the ink was rubbed, the porcelain was left unglazed'. So we see that they already had these porcelain pallets in the Liang Dynasty.

*High-footed Bowls* (*Kao Tsu Wan*).

Chou Yü-ch'ung says in the *San ch'u hsin lu* that 'in the time of Kao Ts'ung-hui, Ruler of the Southern P'ing Dynasty (A. D. 928–48), the porcelain vessels of Ching-nan

all had high feet, and that both the officials and common people eagerly bought them for use. They were known as "High-footed Bowls."'[1]

10. Specimens of the Sung Dynasty (A. D. 960–1279).

*Jên-ho Kuan Vase (P'ing) of White Ting-chou Porcelain. Vase of Ko Porcelain.*

*Ni ku lu*:—'Yü, Governor of Hsiu-chou, has bought for his collection a white Ting-chou vase with four handles, which has the three characters *Jen-ho Kuan*, "Hall of Generous Harmony" written obliquely upon it and baked into the glaze, in the handwriting apparently of either the father or the son of the Mi family.'

Again:—'I saw in the collection of Hsiang Yuan-tu[2] a vase (*p'ing*) of Ko porcelain.'

*Vases (P'ing) fashioned like paper-beaters, with goose-necks, like aubergine fruit, like flower-jars or flower-bags, or in the form of divining stalks or bulrush heads.*

The *History of Vases* (*P'ing Shih*) by Yuan Hung-tao says that 'in the collections of natives of the province of Kiangnan, there are ancient beakers (*ku*) of a brilliant green colour penetrating into the paste, with vermilion patches[3] standing out in relief, worthy of the name of

[1] The ancient sacrificial dishes of bronze and pottery called *tou* were mounted on high stems; and large porcelain bowls for the table, as well as small cups like the celebrated wine-cups of the reigns of Hsuan-tê and Ch'êng-hua of the Ming Dynasty, are still often made in this shape.

[2] This Hsiang Yuan-tu must have been a brother of Hsiang Yuan-p'ien, the author of our illustrated MS. Catalogue. Another book of the same period, the *Ch'ing pi tsang* (Book II, p. 3), published in 1595, gives the name of Hsiang Yuan-p'ien as the possessor of a celebrated collection.

[3] These red patches occurring upon ancient monochrome glazes are much appreciated by collectors. They seem to be generally accidental, and due to the presence of some material such as iron in the glaze. Sometimes these patches will take the form of birds

golden flower dwellings. Next to these rank the pieces of elegant form and fine glaze of Imperial Sung Dynasty porcelain, and of Ko, Hsiang, and Ting-chou porcelain of the same period, which also furnish graceful cottages for the flower goddess. Vases for the scholar's library ought to be low and small; and the pieces of porcelain fashioned like paper-beaters, with goose-necks, like aubergine fruit, like flower-jars, or flower-bags, or in the form of divining-stalks, or bulrush heads, when short and small in size, are suitable for simple ornament.'

### *Large and Small Vases, White and Brown, of Chi-chou Porcelain.*

*Ko ku yao lun*:—'At Chi-chou in the time of the Sung Dynasty there were five porcelain manufactories, of which the one superintended by Shu Kung was the best. He made flower-vases of white colour, and of brown colour, of which the largest were worth several taels of silver, the small ones being decorated with ornamental designs.'

### *Vases for Incense Tools (Chu P'ing).*

*Hsiang Chien*:—'The best vases for the incense tools[1] are those recently made in the province of Wu (Chêkiang), with short necks and narrow mouths, which are heavy

or butterflies, as described above among 'furnace transformations'. The *clair de lune* porcelain of the Yuan Dynasty often has a red splash on one side of the vase or cup; and a patch is always artificially painted upon modern imitations of this beautiful glaze, like those made in the reign of Ch'ien-lung by the Director T'ang Ying.

[1] A set of apparatus for burning incense or scented wood is an indispensable part of the furniture of the library of a scholar. It comprises three things, a covered *box* (*ho-tzŭ*) to hold the prepared incense or chips of sandal-wood, an *urn* (*lu*) for burning it in, and a *vase* (*p'ing*) to hold the tools—a poker, spade, and miniature pair of tongs. The most recherché present is such a set carved in jade, turquoise, lapis-lazuli, or rock-crystal. The Emperor of China some years ago sent a present of one in jade to the Queen of England; and once when on a later occasion he received the foreign Envoys in audience a similar set in cloisonné enamel was set out on a table before him.

below, so that they hold the implements without being overbalanced. Those of Imperial Sung, Ko, and Ting-chou porcelain are not so convenient for daily use.'

*Miniature Jars Glazed with Carnelian* (*Manao Yu Hsiao Ying*).

*Liu-yeu Chai Pi chi*:—'In the manufacture of Ju-chou porcelain carnelian was reduced to powder to make the glaze. At the time it was only made for the use of the Emperor, and it is consequently very difficult to get a specimen. While I was Governor of Ju-chou I saw only one miniature jar, in the house of Wên, a *Chih-hui-shih* (military officer of high rank).'

We find that among ancient vessels, the vases (*p'ing*) were included under the jars (*ying*), and were used only for drawing water and holding wine. The Buddhists had what they called *p'in-ka* vases, which they used for washing their hands, and consequently when flowers were offered in Buddhist worship there is no allusion to the use of vases. It is related in the *Pi ko hsien t'an* that a bonze of the Hsia-yen Monastery in Pa-tung, when he had discovered a green porcelain bowl, gathered flowers to put in this, as an offering to Buddha.

When we come to the porcelain of Ting-chou[1], and to the Imperial and Ko ware of the Sung Dynasty, these included many different forms of flower-vases (*hua-p'ing*), and later under the Ming Dynasty, when they were very fond of offerings of fresh flowers, vases were still more highly valued. Chang Ch'ien-tê in the *P'ing hua p'u* says:—'For keeping flowers the first requisite is the selection of the vases. In spring and winter they ought to be of bronze, in summer and autumn of porcelain: on account of the weather. For the hall and reception room large vases are to be preferred, for the library small ones: with reference to the space. Copper and porcelain

[1] Fig. 21 is copied from a Ting-chou vase of the Sung Dynasty.

are cherished above gold and silver, in order to cultivate simplicity and elegance. Rings and pairs are to be avoided, with a view to aiming at rare and choice specimens. The mouth is preferred to be small, and the foot thick, so that the vase may stand firmly, and not emit vapour.' This is an excellent summing up. Chih T'ing-hsün, who wrote the life called Biography of Han Ch'un Chun, describes him as formerly a friend of Yao and Wei (lovers of peonies), as having known intimately T'ao-ling (of the chrysanthemum), as having bowed as a scholar at the gate of T'ung-fên (of the winter-blossoming plum), and as having opened his heart to Liu-lang and Hsi-tzŭ (of the lotus), adding that his surname was Tsan, his name Ch'ieh-ying, his literary appellation Yi-fang, &c.

According to the *K'ao p'an yü shih*, for keeping lotus flowers in, gourds should be used; for peonies, bulrush-shaped vases are the most appropriate to be chosen. Inside the vase there should be fitted a moulded tube of tin to contract its mouth and make a smaller aperture, which will hold the flowers firmly without allowing them to droop or fall. They must be filled with boiled water for peonies and hibiscus blossoms, so that the winter may not freeze the water in which the flowers are immersed and break the vase. This is another excellent rule for the preservation of vases which ought to be known.

### *Porcelain Ink-pallet* (*T'ao Yen*).

*Chu Shih*:—'Kuo Wei-chai has in his collection a piece of porcelain of round form and white colour. It is perforated in the centre, and is between six and seven inches in diameter. The water is poured into a trench running round the rim, and the ink rubbed upon the raised part inside. It is a perfect specimen of an antique pallet.'

### *Ink-pallet of Ko Porcelain* (*Ko Yao Yen*).

The *P'u-shu T'ing Chi* gives this inscription written upon a pallet of *Ko* porcelain which belonged to Ku Lin:

'Neither the fine clay pallets of Ts'ung-t'ai nor the ancient tiles of the Yeh Palace: Are equal to those made of Ko porcelain in their antique elegance. These are green as the waves of spring and hold water most perfectly: So that even pallets of the finest stone must be ranked below them.'[1]

*Pencil-rests (Pi Ko) of Ko Porcelain in the form of three or five hills.*

*Pencil-rests of White Ting-chou Porcelain in the form of children lying upon flowers.*

*K'ao p'an yü shih*:—'Pencil-rests include those moulded in the form of three hills and of five hills of *Ko* porcelain, of ancient design and rich colouring, and others in the form of children lying upon flowers of white Ting-chou porcelain, brilliantly white and most artistically designed.'

We find in the *Shuo wên*, *hai* defined as the sound of the laugh of a little child, and the *Li Chi* also says that as soon as they can laugh (*hai*) they are called by this name. Mencius, referring to children held in the arms, uses the same word (*hai*), explained by the Commentator to mean the laugh of a baby. The *Ssŭ kung t'u* of the T'ang Dynasty says that girls, when learning to speak, first say *ya-ya*, and another dictionary of the same period says that babies first say *ya'rh*. These different characters, all formed in imitation of the sounds spoken by little children, are synonymous. The term *wa-wa* used above in the *K'ao p'an yü shih* is only another form of *ya-ya*, the *Kuang yün* defining *wa* as the sound of a baby trying to talk.

[1] Tiles of unglazed earthenware used often to be moulded with an inscription recording the date or a sentence of good augury, especially during the Ch'in and Han Dynasties about the Christian era, and these are often mounted to be used as ink-pallets.

*Water Pots* (*Shui Chung Ch'êng*) *of Imperial and Ko Porcelain of the Sung Dynasty of Globular Form, shaped like Buddhist Patras, with Spherical Ribbed Body.*

*Water Pots* (*Shui Chung Ch'êng*) *of Celadon Porcelain shaped like Chrysanthemum Flowers.*

*Water Pots* (*Shui Chung Ch'êng*) *of Ting-chou Porcelain shaped like Vases, and others with Small Mouth, Round Body, and Three Feet.*

*Water Pots* (*Shui Chung Ch'êng*) *of Lung-ch'üan Porcelain with finely engraved decoration.*

*Square and Round Vessels* (*Hu*) *of Imperial and Ko Porcelain, and Vessels shaped like Upright and Horizontal Gourds.*

*Water Pots* (*Chu*) *of Imperial and Ko Porcelain in the form of Two Peaches, of Two Lotus Pods, of a Herd-boy reclining on a Cow, Square-shaped, and Hollowed out in the Pencil-rests.*

*Vessels* (*Hu*) *of Ting-chou Porcelain shaped like Gourds, like Aubergine Fruit, like Camels, also fitted with Pencil-rests.*

*Water Pots* (*Chu*) *of Ting-chou Porcelain shaped like Toads.*

*Vessels* (*Hu*) *of Celadon Porcelain shaped like Sky-Chickens, i. e. Frogs.*

*K'ao p'an yü shih*:—'Among Water Pots for the Writing Table made of porcelain there are the following.—Pots of Imperial and *Ko* porcelain of round form shaped like bowls (*wêng*), those with small mouth shaped like Buddhist alms-bowls, and others with spherical ribbed body. Next the pots of Celadon[1] porcelain in the form of a chrysanthemum flower with an ovoid vessel in the midst of the

[1] The characters used here which I translate 'céladon' are *ch'ing-tung*. Usually we find *tung-ch'ing*, literally 'winter-green', but the first character is said to be corrupt, being used instead of another of similar sound meaning 'east'. So it was originally green porcelain of the Eastern capital (of the Sung Dynasty). This particular glaze is still imitated at Ching-tê Chên.

petals standing upon round feet. Next those of Ting-chou porcelain with moulded decoration, tall and shaped like vases, with contracted mouths convenient for dropping water, and others with round body, contracted mouth, and three feet. Then those of Lung-ch'üan porcelain, with ovoid body entirely covered with finely engraved decoration. The new Chün-chou porcelain of the present day is all modelled after the forms of the last-mentioned ware, but it is hardly good enough to use.'

'Among Water-Droppers (*Chu*) of porcelain we have the Imperial and *Ko* square and round beakers (*hu*), those shaped like upright and horizontal gourds, others in the form of a pair of peaches, of two lotus pods, of a herd-boy lying upon a cow, square-shaped, and those in which the pencil-rest is hollowed out to hold water. In Ting-chou porcelain there are water-vessels moulded in the form of a gourd with its leafy bine trailing round, of an aubergine fruit with stalk and leaves, of a camel, all fitted with pencil-rests, and others shaped like toads. Lastly there are the vessels of Celadon porcelain shaped like frogs, which have a minute hole underneath, delicately worked and artistically finished, and all provided with pencil-rests.'

We find that in the *Hsi ching tsa chi* the Prince of Kuang-ch'üan is described as having a jade toad to hold his writing water, and again, that the wife of Ch'in Chia wrote to him, that she was sending him a gilded bowl, to hold his writing water. These are what came in after-times to be called 'pallet-droppers'. The name of *Shui Chung Ch'êng* was first given to these vessels by Liu Hung, styled Ko-shan, a scholar of the Sung Dynasty, who named the 'Eighteen Officers of the Study', including this as one. Wine-pots were in ancient times called 'Pourers' (*Chu-tzŭ*), till a eunuch of the period T'ai-ho (A. D. 827–35), of the T'ang Dynasty, objected to the name as being that of Ch'êng Chu, and had them called instead *p'ien-t'i*, and it is only the water-pourer which has retained the old name of *Chu-tzŭ*. In the *Yen pei tsa chih* we find described a gold pallet-dropper of the time of the Southern

T'ang Dynasty (A. D. 937–75), which was moulded in the form of a toad, with an inscription in seal script underneath, beneath the body. It was very ancient in style and read as follows.—On the sole of the left foot—'*I come from a cavern in the moon*'; on the right foot—'*To crouch upon the lacquered table*'; on the left hind foot—'*My use is*'; on the right—'*To hold pure water.*' Underneath the neck on the two sides right and left respectively were three characters—'*Tuan-hsi Stone*'; '*Ch'êng-hsin Paper*'; continued on the body, three words on each side—'*The Ink of Ch'ên*'; '*The Awl of hair*'; and underneath the body, seven characters on each side—'*You must all wait quietly till I am ready*'; '*For if I am not provided with water, you are of no use.*'

*Pencil Washing Dishes* (*Pi Hsi*) *of Imperial, Ko, Lung-ch'üan, and Ting-chou Porcelain.*

*K'ao p'an yü shih*:—'Porcelain Pencil Washing Dishes include the following.—In Imperial and *Ko* porcelain, round dishes, dishes moulded in the form of an althaea blossom, with the rim outlined like a Buddhist gong, with globular bodies, in the form of a lotus leaf with up-turned margin, of a joint of sugar-cane with everted mouth, or of oblong outline: but only specimens of pale green colour which have a regularly crackled glaze are specially valued. In Lung-ch'üan porcelain there are dishes with two fishes[1] (engraved or moulded in the paste), others in the form of a chrysanthemum flower with petals, or like a Buddhist alms-bowl, or with the edge moulded in a hundred foliations. In Ting-chou porcelain there are the barrel-shaped dishes bound with three hoops, the dishes moulded in the form of a plum-blossom, of a girdle-ring, of

[1] One of these attributed to the Sung Dynasty in my own collection may be thus described. *Deep Saucer Dish* of thick opaque Chinese porcelain, with narrow horizontal rim, and ribbed externally, ornamented with two fish moulded in strong relief on the bottom. Covered with a dark moss-green *céladon* crackled glaze. Diam. 5½ in. Height 1¾ in.

a square pit, the round dishes moulded like a plaited basket of willow, the round-mouthed dishes, and the foliated dishes. Some are made with a cup in the middle to wash the brush in, surrounded by a plate-like rim to rub it on. There is a large variety of shallow smooth little round dishes of Ting-chou porcelain, any one of which can be utilized to rub the writing brush upon.

*Paper Weights (Chên Chih) of Ko Porcelain in the form of a coiled lizard.*

*Paper Weights of Celadon Porcelain in the form of a lion upon a drum.*

*Paper Weights with children and lions.*

For these see the *K'ao p'an yü shih.*

We find in the *Yen pei tsa chih*, where Hsüeh Tao-tsu and Mi Yuan-chang are described as friendly rivals in writing and painting, that among the implements of their study table, they preferred for paper-weights tigers made of gold, on account of their weight.

*Porcelain Seals (Yin) of Imperial, Ko and Celadon Porcelain.*

*K'ao p'an yü shih*:—'Seals include those of Ko porcelain, Imperial porcelain, and Celadon porcelain. They are cleverly moulded, and the beautiful designs of the ornamental handles cannot be all enumerated.'

We find that previous to the Ch'in Dynasty (255–205 B.C.) Seals were made of gold and jade. Subsequently they were moulded of copper with handles of elaborate design. Towards the close of the Yuan Dynasty (fourteenth cent. A.D.) Mien, Prince of Kuai-chi, used instead to make them of steatite, which, when bright and clean, of rich texture and good colour, is a stone most suitable for the perfect execution of the pencil strokes. These were imitated in turn at Ch'ang-hua and Shou-shan, where many special kinds were fabricated. Porcelain seals being similarly translucent and smooth are also good, but in my humble opinion the art of moulding cannot rival that of engraving.

so that even though the most skilful engraver be employed, it is impossible for the piece to be baked without destroying some of the fine strokes of the inscription. But if the ancient copper seals with ornamental handles be copied, and then baked in the kiln, and afterwards engraved with a steel knife, lively, well-designed seals may be produced.

*Seal Colour Boxes (Yin Sê Ch'ih) of Imperial and Ko Porcelain, Square, Octagonal and Many-Lobed.*

*Seal Colour Boxes of Ting-chou Porcelain, of Square Form with Moulded Decoration.*

*K'ao p'an yü shih*:—'Among boxes for holding vermilion for seals, the square ones of Imperial and *Ko* porcelain are the best; there are also octagonal and many-foliated boxes, but these are very rare. The square boxes of Ting-chou porcelain, ornamented outside with moulded decoration, are very beautiful, but also rare.'

We see in another part of the *K'ao p'an yü shih* seal-colour boxes made by Lu Tzŭ-k'ang described, carved out of white jade, with lizard-like dragons coiling over the whole surface as well as on the covers, of perfect and antique designs, and the author adds that in his own time many imitations of these were made. He mentions also square boxes of jade dating from the time of the Three Ancient Dynasties, covered with earth-rust inside and out, and stained with blood-spots, the original use of which was not known, but which answered admirably for use as vermilion boxes. He says again that although for ornamental vessels jade generally ranked before porcelain, yet for the particular purpose of holding seal-colours, porcelain was valued even beyond jade. This is a most just conclusion. In my humble opinion when made new they should be carefully worked and artistically finished, and models like the white jade seal boxes of Lu Tzŭ-k'ang should be given to the Potters for them to copy.

*Incense Urns of Imperial, Ko, Ting-chou, and Lung-ch'üan Porcelain, in the shape of Sacrificial Vessels and of Mammillated Bronzes.*

*Hsiang Chien*:—'Among Incense Urns (*Hsiang Lu*) those of Imperial, Ko, Ting-chou and Lung-ch'üan porcelain, shaped like the ancient bronze sacrificial and mammillated vessels, of about the size of teacups, and of artistic design, are the best.'

See also the *K'ao p'an yü shih.*

We find that the *Po wu yao lan* says that the designs of the bronze urns of the reign of Hsüan-tê (A. D. 1426–35) were generally copied from porcelain of the Sung Dynasty, the forms of which are generally good, although but few, alas! have survived to our day. In ancient times there were no incense urns, and the antique bronze vessels, which are now utilized as incense urns, were originally either sacrificial vessels for holding wine and meat, libation cups, or cooking-vessels. The incense urns made in later times have often reproduced the forms and decoration of these. The ancient Po-shan Lu[1] was a vessel specially designed for burning incense, but this was of very different form from that of the later incense urns. Those made by Ting Sui at Ch'ang-an had nine tiers, all carved with strange birds and fabulous animals, of most wonderful form and design, instinct with life and movement. Ho-tê sent to Fei-yen one of these Po-shan Lu, which had five tiers, as may be seen recorded in the *Hsi ching tsa chi.* These forms are no more seen.

[1] These bronze urns are figured in books as in the *K'ao ku t'u* (Bk. X, p. 15). A vase standing in a round dish terminates above in four broad radiating leaves, from the centre of which springs an upright flower-stem, supporting a round bowl with a clump of mountains (*po shan*) inside. It weighs 23 ounces, and has inscribed sentences of good augury in antique script. One of these used to be presented by the Emperor during the Han Dynasty to each of the princes as he left after audience. They are figured, too, upon contemporary Buddhist sculptured stones of the Wei Dynasty (A. D. 386–582).

*Incense Boxes* (*Hsiang Ho*) *of Ting-chou Porcelain.*

*Hsiang Chien*:—'These include boxes of carved gold lacquer[1] of the Sung Dynasty, fashioned in the form of a plum-blossom, or of a joint of sugar-cane. Also boxes of Ting-chou and Jao-chou porcelain. Also Japanese (*Wo*) boxes with three or five smaller ones inclosed within. The covers must be made to fit accurately upon the top, so as not to allow the perfume of the incense to escape.'

See also the *K'ao p'an yü shih.*

Good incense must be neither too dry nor too moist. After the ingredients have been mixed, it should be carefully wrapped up in waxed paper, and buried in a hole under the ground for about half a month, before it is fit for use. For keeping incense boxes of porcelain are the most suitable. The character *ho* (box) is also written without the radical *min* (vessel). It is also called *ho-tzŭ.* A small box inclosed within another is called the 'adopted son', which is why the *Hsiang Chien*, in the passage quoted above, speaks of 'three son' and 'five son' boxes. The *Po wu yao lan* says that 'there are also incense urns and boxes of Chün-chou porcelain, but made of coarse yellow clay and not good'.

*Paste Pots* (*Hu Tou*).

*K'ao p'an yü shih*:—'The tall jars of Chien-chou porcelain, which are black outside and white within; or the tall jars of Ting-chou porcelain of round shape, as well as those moulded in the form of a garlic-bulb or of a bulrush; or the square vessels of *Ko* porcelain shaped like a corn-measure with a horizontal bar across the top as a handle; any of these can be used for Paste Pots.'

[1] The *Ko ku yao lun* (Bk. VIII, p. 1) describes red lacquer objects fabricated at the Imperial Manufactory of the Sung Dynasty as often worked upon a gold or silver ground.

*Reading Lamps* (*Shu Têng*).

*K'ao p'an yü shih*:—'The lamps[1] of Ting-chou porcelain with three nozzles, or the two-nozzled lamps of porcelain of the reign of Hsüan-tê (A. D. 1426–35), either of these may be chosen for use in the library.'

*Porcelain Pipes* (*Tz'ŭ Hsiao*).

*Nan ts'un sui pi*:—'The porcelain pipes made at Tê-hua are pure white in colour and of elegant form, but out of a hundred specimens only one or two are in perfect tune. When they happen to be in tune they produce mournful and deep notes, far excelling those of the ordinary pipes made of bamboo.'

*Porcelain Pillows* (*Tz'ŭ Chên*).

*K'ao p'an yü shih*:—'The pillows of ancient porcelain that are two feet and a half long and six inches broad may be used. Those only one foot long are known as "corpse pillows", and are among the things found in ancient tombs; and even when these are of white Ting-chou porcelain of the Sung Dynasty, they ought not to be used. If a large one of porcelain is not to be obtained, broken pieces may be ground down, and mounted on wood, so as to make a pillow. These pillows are most efficacious in keeping the eyes clear and preserving the sight, so that even in old age fine writing can be read.'

*Chü yi lu*:—'At Tê-chou Chao, Vice-President of one of the Six Boards, while excavating an ancient tomb at his own place, discovered a porcelain pillow. Upon the pillow were written the four stanzas of the verse beginning: *Po pao chuang yao tai* (Wearing a girdle studded with a hundred jewels).'

[1] Several lamps are figured in the Illustrated Catalogue, including one painted in blue and white of the reign of Hsüan-tê with four nozzles. There is also a branched pricket candlestick for three candles of Ting-chou porcelain of elaborate design in the same collection.

In the Biography of Fêng Ning we find it said that for preserving the eyes there is nothing to equal pillows made of porcelain, which keep them even to old age from becoming dim. These used to be much used in the Palace of the Emperor Ning.

*Pot for Watering Flowers* (*Hua Chiao*) *of Sung Dynasty Imperial Porcelain.*

The *P'u shu t'ing chi* describes a pot of Imperial porcelain for watering flowers, with the inscription 'Red as the clouds of dawn scattered by fishes' tails: Rich as pear-blossom watered by the early rain.'

We find that Lo Ch'iu describing the 'nine gifts to flowers' gives as the third 'pure water from a sweet spring'. The *Ch'ing yi lu* speaking of the fertilization of flowers by rain likens it to 'flowers bathing.' The watering-pot can supply the fertilizing force of rain and thus bring one of the 'nine gifts.' Its fabrication started doubtless from the ancient jar (*wêng*) described before, as carried by the old man to water his vegetable garden.

*Ting-chou Porcelain Mottled like a Hare's Fur* (*T'u Mao Hua*).

Hsü Tz'ŭ-shu in his book on tea, the *Ch'a Su*, says:—'The tea-bowls (*ch'a ou*) that were preferred in ancient times were those of Ting-chou porcelain mottled like a hare's fur, and these were also used in the competitive tea-tasting parties.'

*Flowered Porcelain of Ting-chou* (*Ting Chou Hua Tz'ŭ*).

Su Tung-p'o (A.D 1036–1101) in an Ode upon Boiling Tea in the Examination Hall writes:—'The Duke of Lu boils the tea after the fashion of Western Shu: The flowered porcelain of Ting-chou is like carved red jade.'

*Chien-an Hare's-fur Cups* (*T'u Hao Chan*).

Ts'ai Hsiang writes in the *Ch'a Lu*:—'Tea is of light colour and looks best in black cups. The cups made

at Chien-an are bluish-black in colour, marked like the fur of a hare. Being of rather thick fabric they retain the heat, so that when once warmed through they cool very slowly, and they are additionally valued on this account. None of the cups produced at other places can rival these. Blue and white cups are not used by those who give tea-tasting parties.'

*Partridge Mottled Cups* (*Chê-ku Pan*).

*Ch'ing yi lu*:—'In the province of Fukien (*Min*) they make teacups (*ch'a chan*) marked with mottlings like the breast of a partridge, which are highly valued for the competitive tea-tasting parties.'[1]

According to the *Fang yü shêng lan* these hare's-fur cups were made at Ou-ning, and the author in an explanatory note quotes from a verse of Huang Lu-chih the line—'The porcelain bowls of Chien-an, mottled like a partridge,' which shows that 'the partridge-mottled cups' were the same as the 'hare's-fur cups'. In the competitive tea-tasting parties the rule was that he whose tea trace disappeared first lost, and that the one whose trace lasted longest won. Therefore in the comparison of the different competitors the terms 'one water', 'two waters', &c., were used. Tea being light in colour, the trace would be more easily visible when it had been poured into black cups, and this is why the hare's-fur cups were so highly appreciated. Again, we are told in the *Ch'a Lu* that, when the tea was going to be infused, the cups had first to be warmed at the fire, because the tea would not rise if the cup were cold. The hare's-fur cups were so thick that they retained the heat a long time, another reason why they were preferred. All those who have described the hare's-fur cups refer them to Chien-an, but Hsü Tz'ŭ-

[1] These tea-tasting competitions were conducted with an elaborate ceremonial during the Sung Dynasty. They were afterwards introduced into Japan, and are well described by Mr. Franks in his Catalogue of the Collection of Japanese Pottery and Porcelain in the South Kensington Museum.

shu describes the Ting-chou hare's-fur mottled cups as the most suitable for competitive tea-tasting, so that Ting-chou had these cups previously. Tung-p'o in his Verses on Boiling Tea in the Examination Hall quoted above refers to 'The flowered porcelain of Ting-chou, like carved red jade', which shows that the black cups were not the only ones valued. In a verse sent by him to Ch'ien Shih of Nan-p'ing the same poet writes: 'When the Taoist comes in early morn from the Nan-p'ing Hills: To test the infusions of tea, by the three-fold trial: We will surprise him at noon with hare's-fur mottled cups: And bring out for him a bright jar of gosling-down wine.' This shows that these hare's-fur cups were also used to hold gosling-down wine.

*Little Sea Gulls* (*Hsiao Hai Ou*).

*Ch'ing yi lu*:—'The potters of Yo-chou were the first to make the particular kind of deep bowls without feet, which are known as "little sea-gulls."'

*Egg-shell Bowls* (*Luan Wan*).

Su Tung-p'o (A. D. 1036–1101) in a verse composed while eating a cold decoction of Sophora leaves writes, 'How green, floating in the egg-shell bowls, are the cakes of sophora sprouts.'

*Brown Bowls* (*Tzŭ Wan*).

The works of Su Tung-p'o describe how, while the Emperor was giving a banquet in honour of his birthday, there was a little snow falling on the first day, when the poet went with his brother Tzŭ-yu to call upon Wang An-kuo; they drank some wine together in the Ch'ing-hsü Hall, and he composed the stanzas:—'From the silver vase flows out in oily stream the ant-wing wine: On the brown bowls float up the grains of coiling-dragon tea.'

*Beaten Copper Tea Bowls* (*T'ung-yeh T'ang Pieh*).

*Yen fan lu*:—'The Supplement to the Works of Su Tung-p'o contains a verse composed by him, while in

attendance upon the Imperial Equipage at the Ching-ling Palace, in which he writes:—"How much when sick do I enjoy the Emperor's tea floating in copper-foil cups." In our own day, when tea is served to guests in the Imperial Presence, cups of Chien-chou porcelain are never used, but instead large shallow tea-bowls (*t'ang-pieh*) of pure white colour, which resemble in shape only the above-named bowls of hammered copper, the colour of copper being a yellow brown.'

We find that the porcelain of Shou-chou was yellow, and made the tea brown in colour; the porcelain of Hung-chou was brown, and made the tea look black; and consequently the *Ch'a Ching* decided that these were unsuitable for tea. The name of copper-foil seems to be derived, however, from the shape rather than from the colour. In spite of the fact that Hsing-chou porcelain was white and Yueh-chou porcelain green, Lu (in the *Ch'a Ching*) ranks that of Yueh-chou above that of Hsing-chou. During the Sung Dynasty the black cups of Chien-an were the most highly valued, and white porcelain was rejected, probably because of the special suitability of the former for the tea-tasting competitions. For drinking-vessels white is naturally the best colour, and therefore in the time of the last author (twelfth century) the Imperial tea-service was of white porcelain.

*Tung-p'o's Tea Bowls* (*Ming Wan*).

The works of Su Tung-p'o include also the following verse sent to Tu Chieh:—'Fairy buds have blossomed in the tea bowls: like sprays of hibiscus and polygonum cut off with scissors'—for an explanation of which refer to the appendix to Tung-p'o's 'Eulogy of the Eighteen Buddhist Arhats'. This describes how Tung-p'o had in his house images of the Eighteen Lo-han, to which he used to offer tea, and how this was wont to be transformed into white milk, or solidified into flowering trees, among which the peach, plum, and peony were in turn clearly identified by him.

*Yi-kung's Tea Cup (T'ang Chan).*

*Yi chien chih*:—'Chou Yi-kung[1] sent a teacup as a present to a poor friend, who after his return home prepared tea and poured it into the cup, whereupon there immediately appeared a pair of cranes, which flew out of the cup and circled round it, and only disappeared when the tea was drunk.'

These last are two very wonderful stories, but like the transformations which happen spontaneously in the furnace, they may not be impossible. Porcelain is created out of the element 'earth', and combines in itself also the essential powers of the elements 'water' and 'fire'. It is related in the *Wu ch'uan lu*, that when the military store-house at Mei-chün, in the province of Ssŭ-ch'uan, was being repaired, a large water-jar was found inside full of small stones. After the religious worship on the first day of each moon, another lot of water and stone used to be added, and this was done for an unknown number of years, and yet even then it was not quite full. We read again in the *Yu ya chih*, that while Ts'ao Chu was a small official at Ch'ien-k'ang, Lu was officiating as Prefect, and there stood in front of his Yamên a large jar of the capacity of five hundred piculs, from the interior of which used to come out both wind and clouds. These are similar stories, and are quoted here on that account.

*Small Round Dishes (Ch'üan P'an) of Ting-chou Porcelain.*

*Ko ku yao lun*:—'These round dishes of Ting-chou porcelain were in ancient times used as utensils for washing the pencil-brush. The ancients used vases for tea, and jars for wine, but they did not use pots with spouts (*hu-p'ing*), nor bowls with lips. Teacups with saucers (*t'ai-p'an*) were first introduced during the Yuan Dynasty (A. D. 1280–1367). There are none of these things either in Ting-chou ware or in the Imperial porcelain of the Sung Dynasty.'

[1] A celebrated military commander during the Sung Dynasty, who checked the incursions of the Chin Tartars in A. D. 1118 and 1126.

*Imperial Porcelain Cup in the form of a Human Face (Jên Mien Pei).*

*Ni ku lu*:—'I saw in the Collection of Hsiang Yuan-tu a cup, moulded in the form of a man's face, of Imperial Porcelain of the Sung Dynasty.'

*Double Wine Cup in the form of two peaches, with Saucer, of Ko Porcelain.*

*Ni ku lu*:—'Hsiang Hsi-hsien describes a double wedding-cup of Ko porcelain, moulded in the form of two peaches, joined together so as to separate into two cups if desired, which belonged to Ssŭ-ma Kung. It was provided with a round dish of Ko porcelain as a saucer, hollowed out in the centre so as to fit exactly, and was a most ingenious contrivance. It has since passed into the possession of Liu, Commandant of the Imperial Guards.'

We find, however, saucers already in use in the time of the Han Dynasty (202 B. C.–A. D. 220), as may be seen by referring to the *Commentary* on the Book of Rites written at that time, so that the *Ko ku yao lun* is incorrect in saying that the round dishes of Ting-chou porcelain were the ancient *hsi*. The illustrations of sacrificial vessels in the Ritual of the Chou Dynasty figure these *hsi* as similar to the *lei*. The *hsi* and *lei* both held one *hu*, and were like vases in form, not at all like the small round dishes (*ch'üan-p'an*) of Ting-chou porcelain. Moreover, in the *Ni ku lu* we have a wedding-cup of Ko porcelain described as provided with a saucer (*ch'êng-p'an*), which clearly confirms what I have just said. These wedding-cups are mentioned in the Ancient Ritual *Yi Li*, which says that during the marriage ceremony the wine-jar (*tsun*) was placed upon the altar to the east of the door, filled with the proper wine, with the basket-tray upon its south, holding four libation cups (*chüo*) and one double wine-cup (*ho-ch'êng*), described in the *Commentary* as made of split gourd. The four *chüo* and the double wine-cup were all filled in turn, and three cups each had to be drunk by the bridegroom and bride. The dictionary *Shih wên tzŭ*

*lin* writes the character (*ch'êng*) with radical *tou* (vessel), and defines it as made of shell. In ancient times they were made both of gourds and of shell. Hu Ying-ling in the *Chia yi ch'ên yen* writes that there was in the possession of Yang Chün, a high mandarin holding office in the Capital, a bridal double wine-vessel, carved out of a single piece of jade, formed of two cups side by side, pierced so as to form a channel for the wine to pass from one to the other, the two cups supported upon a phoenix standing upon a crouching monster. This was not more than some three inches in height, of most artistic workmanship, and worthy to form a pendant to the above.

### *Octagonal Tazza-shaped Cup (Pa-chüeh Pa Pei) of Ko Porcelain.*

*Ni ku lu*:—'I saw in the Collection of Hsiang Yuan-tu an eight-sided stem-cup of Ko porcelain.'

We find in the Southern Annals (*Nan Shih*) in the section upon Ceremonial Worship of the Ch'i Dynasty (A. D. 479–501), a description of the weddings of the princes and nobles, which says that the double bridal cups were made of pure silver, a fashion then of recent introduction, and that afterwards, with the exception of the united rings of gold and silver, all the different new vessels were made of pottery. Therefore we see that these cups were made of pottery before the time of the Six Dynasties. Wine-cups are also called *chung* as in a stanza of Su Tung-p'o:—'Here is some light wine, let us drink a couple of cups' (*chung*).

### *Wine Cups called K'o.*

*Ch'ing yi lu*:—'Porcelain collectors all speak of the green cups (*k'o*) of Yo-chou.'

In the work of K'ung Ts'ung Tzŭ we find an ancient saying:—'Yao and Shun took a thousand cups (*chung*), Confucius a hundred beakers (*ku*), Tzŭ Lu when he drank wine drained ten *k'o*.' Therefore, the *chung* and *k'o*

existed among wine-vessels as long ago as their time. Yang Hsiung in his 'Strictures on Wine' (*Chiu chên*) speaks of '*ch'ih-yi* and *ku-chi* with bodies as large as jars (*hu*), every day filled with wine and borrowed again to buy more', these *ch'ih-yi* being explained by Ying Shao[1] to be cups shaped like the *k'o*. So the *k'o* were also known by the name of *ch'ih-yi*. This name afterwards became contracted to *ch'ih*, as we see in a stanza of Huang Lu-chih:—'Your present of a *ch'ih* has smoothed my frowning brow'; and also in Su Tung-p'o, 'A million pieces of gold, a thousand *ch'ih* of wine.'

*Bowls (Wan) of Jao-chou Porcelain Painted in Blue.*

*Ko ku yao lun*:—'The porcelain made at Jao-chou at the Imperial Manufactory is of thin fabric and translucent, of white colour with blue decoration. Compared with the porcelain of Ting-chou it is slightly inferior.'

This seems to be the first mention of the porcelain of Jao-chou.

*Chu P'ing Vases for Incense-burning Tools.*

These are described in the *Hsiang chien* and also in the *K'ao p'an yü shih.*

*Chêkiang Jars (Chê Wêng).*

*T'ai p'ing huan yü chi*:—'At Hang-chou, in the T'ing-shih Hills, the village T'ing-shih Ts'un, belonging to the township Yü-shih Hsiang, is chiefly inhabited by potters, who are very clever in the manufacture of the large water-jars, which have recently been called Chêkiang Jars, since the crossing of the river and removal of the dynasty to the South (in A. D. 1126).'

[1] Yang Hsiung, a philosopher who lived 53 B. C.–A. D. 18, was the author of the Vocabulary *Fang yen* and other works. Ying Shao, second century A. D., wrote the *Fêng su t'ung* (No. 25).

*Porcelain of Prohibited Colour* (*Pi-sê Tz'ŭ*).

*Liu-yen Chai Pi chi*:—'In the time of the Southern Sung (A. D. 1127–1279) there was produced at Yü-yao Hsien porcelain of prohibited colour.'

This must be a relic of the porcelain of prohibited colour of the Ruler of Ch'ien, described above. In the present day there is no longer any of this *pi-sê* porcelain to be seen. It is described in the *Pi chi* as coarse, plain, and long-lasting, and as like the porcelain of Chün-chou. The former *pi-sê* porcelain was probably of somewhat similar character.

II. Specimens of the Yuan Dynasty (A. D. 1280–1367).

*Small-footed Bowls with Moulded Decoration, of Jao-chou Porcelain.*

*Wine Pots and Wine Cups of Blue and Black Colour painted with Gold, of Jao-chou Porcelain.*

*Ko ku yao lun*:—'Of the porcelain baked at Jao-chou in the Yuan Dynasty, the small-footed bowls with moulded decoration, which had the inscription *Shu-fu* (Imperial Palace) written inside, are the best. There are also pieces of blue and black coloured ground painted with gold, comprising chiefly wine-pots (*chiu-hu*) and wine-cups (*chiu-chan*), of great beauty.'

We find that at Jao-chou, during the Sung and Yuan Dynasties, porcelain was only made in obedience to the issue of a special Imperial edict, and that afterwards the manufactory was closed again, which is the reason why so very few specimens have come down to us. I quote therefore the *Ko ku yao lun* to give a general idea of it.

# BOOK VI

## DESCRIPTION OF SPECIMENS (CONCLUDED).

### 12. Specimens of the Ming Dynasty (A. D. 1368–1643).

*Sacrificial Furnace of Green Porcelain.*

*Ch'un ming mêng yü lu*:—'The round Altar of Heaven is surrounded by a square wall pierced by four gates. The inner gate is called the Gate of Propitious Stars. Outside the Southern Gate, towards the south-east, is built the burning furnace of green porcelain, beside the pit for the hair and blood (of the victims sacrificed).'

We find that in ancient times pottery was used for cooking-vessels. The *tsêng*, *p'ên*, *yen* and *li* of the potters of the Chou Dynasty, for example, were all cooking utensils. We see described above how, in the Worship of Heaven and Earth, simplicity is valued beyond everything, and pottery used in imitation of ancient methods of manufacture.

*Sacrificial Utensils of Porcelain (of the reign of Chia-ching (A. D. 1522–66), and given in the Chiang-hsi ta chih).*

'Wine Jars called *T'ai Tsun, Hsi Tsun, Chu Tsun*.'[1]

[1] These sacrificial vessels are still used in the present day, and are figured in the Institutes of the Dynasty, *Ta Ch'ing Hui tien t'u* (Bk. XXV). The *T'ai Tsun* are solid jars with swelling body and two moulded handles in the shape of animals' heads, the *Hsi Tsun*, modelled in the form of a rhinoceros carrying on its back a vase with cover, the *Chu Tsun*, deep cup-shaped cylinders quite plain. The smaller wine-vessels called *Hsiao Lei* are of varied form, decorated with scroll ornament, from which they get their name. The *Pien* and *Tou* are round and flat-bottomed bowls with stems and covers covered with decorative scroll designs. They are glazed of different colours—of *blue* porcelain for the Altar of Heaven and for the Temple of the Land and Grain, *yellow* for the Altar of Earth and for the Worship of the God of Agriculture and the Goddess of Silk, *red* for the Altar of the Sun, *white* for the Altar of the Year-Star (Jupiter), &c.

'Smaller Wine-vessels called *Hsiao Lei*.'

'Bowls (*Wan*) for plain soup (*t'ai kêng*), and for savoury soup (*ho kêng*).'

'Shaped Bowls with Feet and Covers (*Pien, Tou*) and Round Dishes (*P'an*), for the hair and blood.'

'Flattened Vases (*Pien Hu*) and Square Jars with Covers (*Fang Kuan*).'

'Vases called *K'an P'ing, Mu-tan P'ing, Hu P'ing*.'

'Bricks for the Hall of Worship (*Pai Chuan*).'

We find that in ancient times pottery was much employed for sacrificial utensils; and that, besides the wine-jars called *T'ai Tsun*, there were the *Wu*, *T'ai*, *Hu* and *Fou*, all of them wine-vessels, and the *Pien* and *Tou*, square and round bowls for offerings of food, all which were used in ceremonial worship, although they are not described in the Classics. During the Ming Dynasty, when porcelain reached its culminating point, all kinds of things were fashioned of it, and many novel forms made their appearance for the first time. The Bricks called *Pai Chuan* in the above list were used to pave the floor to mark the place of prostration. During the Han Dynasty the high officials had audience of the Emperor in the palace called Ming-kuang Tien, the floor of which was painted with vermilion, and was called in consequence the Vermilion Court. Upon this the Presidents knelt down when they presented memorials, the place of prostration being marked for the purpose in red. Wang Jên-yü, relating his journey (in the tenth century) to the Capital, (Lo-yang) says that 'in the palace Han-yuan Tien, the path called the Dragon's Tail Road, for a distance of between sixty and seventy paces, up to the first raised step, was all paved with carved bricks.' This is an instance of the use of bricks to make an ornamental floor. Buddhist Temples of the present day are built in the style of the ancient palaces, and porcelain bricks are still employed in their construction. The bricks of Chia-ching

porcelain comprised in the foregoing list are properly included among the sacrificial utensils.

*Porcelain of the Reign of Yung-lo* (A. D. 1403–24).

*Cups made to fit the hand* (*Ya-shou Pei*).

*Po wu yao lan*:—'The Cups called *Ya-shou Pei*[1] have a wide-spreading rim and contracted waist, the ring at the foot of sand, and the bottom glazed. Those decorated inside with two lions sporting with embroidered balls, and with the six characters, in the old seal script, *Ta Ming Yung lo nien chih* (Made in the reign of Yung-lo of the Great Ming Dynasty), or with four characters (the first two being omitted), written no larger than grains of rice, form the first class. Next to these rank those decorated with mandarin ducks. After these those decorated inside with flowers. The cups are painted outside in blue of deep and brilliant colour with designs of artistic beauty. They have been handed down from a distant time and their value is consequently very high.'

We find that these are the wine-cups that used to be called *pieh*, having expanded mouths and contracted waists. When held in the grasp, the rim when level rested naturally upon the hand, hence the name of *ya-shou pei*.

*Porcelain of the Reign of Hsüan-tê* (A. D. 1426–35).

*White Altar Cups* (*Pai T'ai Chan*).

*Po wu yao lan*:—'These Cups have inscribed inside the character *t'an* (altar), and are the white wine-cups which are commonly called "altar-cups". They are of fine paste covered with a thick glaze, of elegant form, and worthy of a place in the library of a scholar of culture.'

[1] There is one of these bowls in the *Franks Collection* in the British Museum, thus described in the Catalogue:—'Thin ivory-white Chinese porcelain. Very small base and wide rim, in which are six indentations. Inside are two five-clawed dragons very faintly engraved in the paste and glazed over. In the centre an inscription, also engraved under the glaze, in an ancient seal character, being the mark of the period Yung-lo (1403–24). Height $2\frac{3}{4}$ in. Diam. $8\frac{1}{2}$ in.'

We find that in the Bamboo Palace of the Han Dynasty the altar was made of reddish earth, and that in the Odes for the Worship of Heaven used during the Ch'i and Liang Dynasties it is styled 'the red altar' (*tzŭ t'an*). In the Ceremonial of Taoist Worship the same word (*t'an*) is always used for 'altar'. These cups must have been used to hold offerings placed upon the altar.

*White Tea Cups* (*Pai Ch'a Chan*).

*Po wu yao lan*:—'These when compared with the "altar cups" are but slightly inferior. They have a rounded body and are convex below with a thread-like rim round the foot. The glaze is as brilliant and translucent as jade, and beneath it there are engraved inside the cup, in extremely fine lines, a dragon and phoenix. They are marked below with the six characters *Ta Ming Hsüan tê nien chih* (Made in the reign of Hsüan-tê of the Great Ming Dynasty), also under the glaze. The surface is marked with faint elevations, rising like the small tubercles on the peel of an orange. Even in the porcelain of Ting-chou we find no pieces to rival these, and they are truly remarkable specimens of this particular reign.'

*Red Fish Tazza-shaped Cups* (*Hung Yü Pa Pei*).

*Po wu yao lan*:—'Red precious stones from the West having been reduced to powder, the forms of the fish were painted on and developed by baking from the body of the porcelain, so that the bright colour of the jewels stands out in relief, of a pure red dazzling to the eyes. When purple or blackish in tint, it is owing to some defect in the process of baking, and the specimen is of less value.'

We find that *pa* meant originally the portion of the reins grasped in the hand, being written with radical *ko* (leather). When used to signify the handle of a bow it was written with radical *kung* (bow). *Pa*, the handle of a knife, was written with radical *mu* (wood) and a different

phonetic. The hilt of a sword was also called *t'an*, as we see in the *Commentary* on the *Chi chiu chang*, which explains *t'an* as the part of the sword held in the hand. The word generally was applied to the part grasped by the hand. The dictionary *Pai pien* writes the handle of a knife, and the *Ku ching chi* the hilt of a sword, both under the radical *ko* leather, so that this is an ancient character. The *Ni ku lu* quoted above, however, describing the octagonal tazza-shaped cups of Ko porcelain, writes the character *pa* with the radical *shou* (hand), and, as it refers to the portion of the cup grasped by the hand, it may be correctly also written in this way.

*Cups with stems* (*Pa Pei*), *painted in blue with dragons, pines and plum blossom.*

*Wine Cups with Stems* (*Chiu Pa Pei*), painted in blue with figure scenes and sea monsters.

*Basket-Bowls with Covers on Jointed Bamboo Stems* (*Chu Chieh Pa Chao Kai*).

These three kinds are described in the *Po wu yao lan* as novel productions of this reign, which were unknown in ancient times.

*Tea Cups* (*Ch'a Chan*) *decorated with figures armed with light silk fans striking at flying fire-flies.*

Hsü Ying-ch'iu[1] describes these figures (illustrating a line in a poet of the T'ang Dynasty), as 'most delicately and artistically executed, resembling to a hair's breadth a picture painted by Li Ssŭ-hsün.'

*Wine-Pots painted in the five colours—moulded in the form of Peaches* (*T'ao Chu*): *of Pomegranates* (*Shih-liu Chu*): *of Two Gourds* (*Shuang Kua Chu*): *of a Pair of Mandarin Ducks* (*Shuang Yuan Chu*): *of Geese* (*O Chu*).

According to the *K'ao p'an yü shih* 'these double gourd

[1] A writer of the first half of the seventeenth century, author of a collection of excerpts from other works in thirty-six Books. Cf. Wylie's *Chinese Literature*, p. 137.

wine-pots are painted in natural colours, as if actually growing, while the mandarin-duck pots, and the goose pots, are also carefully modelled and artistically finished.'

*Washing Dishes* (*Hsi*) *in outline like a Buddhist Gong: with moulded fish and water-weeds: with hibiscus flowers: with lizards.*

We find washing-vessels (*hsi*) among the ancient ritual vessels, but the *hsi* here mentioned, although they were called by the same name, were intended to be used for washing pencil-brushes. The *K'ao p'an yü shih* directs that the pencil, when the writing is finished, should be dipped into the bath (*hsi*) to wash away the remaining ink, then the hair will not get loose and it will last for a long time. After it has been washed its cap must be put on to preserve the point from injury. If it be very greasy or dirty it ought to be washed in a decoction of gleditschia pods. This is a good recipe for preserving pencils. The poet Su Tung-p'o used to soak his brushes in a decoction of the plant *huang-lien* mixed with calomel, and dry them afterwards before he put them by. Shan-ku used to boil together Ssŭ-ch'uan pepper and *huang-nieh*, and rub the ink with this mixture to preserve the brushes. The *Wên fang pao shih*, 'Precious Ornaments of the Study,' recommends the use of sulphur to keep the hairs of the pencils from sticking together, a recipe specially applicable to new pencils.

*Large Bowls* (*Ta Wan*) *of cinnabar-red colour. Small Pots* (*Hsiao Hu*) *of cinnabar-red.*

The *Po wu yao lan* describes the colour of these as being as red as the sun, and says that the mouths of the pieces had white rims[1].

*Pickle Pots* (*Lu Hu*): *Small Pots* (*Hsiao Hu*).

The *Po wu yao lan* mentions these two as novelties which they did not make in ancient times.

[1] This cinnabar or vermilion red must be what is usually called *hsien hung*, the bright monochrome red due to silicate of copper.

Referring to the *Chieh ch'a chien*, we find that the author, Fêng K'o-pin, declares that for teapots porcelain is the best material, and that the smallest pots are those to be most highly valued. He says that each guest ought to have his own teapot, so that he may pour out his tea himself, and have leisure to drink it and to enjoy its excellent flavour, and that the teapots ought to be small, so that the fragrance may not escape and the aroma be not lost. In my humble opinion covered bowls are best for infusing tea, and the smallest of these are to be preferred. The largest bowls do not hold more than the smallest teapots. The larger the pot, the more is the fragrance dissipated and the flavour altered, so that the large ones are the worst of all.

*Flower Vases* (*Hua Tsun*) *with expanded mouth.*

The vases called *tsun* [1] differ from the vases called *p'ing* in the following respects. The *p'ing* have the mouth smaller than the body, the *tsun* have the body smaller than the mouth; the *p'ing* are tall, the *tsun* short. The latter is shaped on the model of the ancient *tsun* (a sacrificial wine-vessel made of bronze).

*Barrel Seats* (*Tso Tun*) *decorated with floral designs carved in open-work filled in with colours.*

*Barrel Seats not carved, of floral design filled in with the five colours.*

*Barrel Seats decorated with painting in the five colours on a blue ground.*

*Barrel Seats painted in blue on a white ground.*

*Barrel Seats with an ice-like crackled glaze.*

*Po wu yao lan*:—'The seats with floral designs carved in openwork filled in with the five colours, are as bright as cloud-pattern brocades, and those of solid form, decorated

[1] The *tsun*, commonly called 'beakers' by collectors, are cylindrical vases with wide trumpet-shaped mouths.

with floral designs painted in colours, are also of great beauty and pleasing to the eye. Both of these kinds have a deep clear green ground. There are others with a blue ground, decorated with painting in colours, like flowers carved in cobalt blue. Others are painted in blue on a white ground, others covered with a network of ice-crackles. The forms and designs of all of these differ from anything known in former times.'

We find that when, during the Sung Dynasty, the Minister of State, Wang Kuei, had audience of the Emperor in the Jui-chu Hall of the Palace, he was given a porcelain barrel-shaped seat painted purple and commanded to be seated. The character used is read *tun* and it is defined by the dictionary *Erh ya* as originally signifying a bowl. The first stage in the elevation of a mound of earth was called *ch'iu tun* as it resembled a bowl turned over. The Odes have a line, 'I went to Tun-ch'iu,' and the Commentator in Mao's Edition explains the name as meaning a mound of one tier. The porcelain seat, which also resembled in shape an upturned bowl, was given this same name of *tun*, the radical *t'u* (earth) being prefixed to the old character. The *Commentary* on the *Erh ya* says that, in the region of Chiang-tung, a high earth mound was called *tun*, and the modern character is a vulgar form of this. This barrel-seat differs from the stool (*wu-tzŭ*) in the absence of legs, and also from the smaller stools called *têng*. There used also to be made barrel-seats of Chün-chou porcelain, which are described in the *Po wu yao lan* as fabricated of a paste of yellow sandy clay, and as being roughly made, thick, and not good.

*Flat Jars* (*Pien Kuan*). *Cylindrical Jars* (*T'ung Kuan*) *for Honey Preserves.*

These are described in the *Po wu yao lan* as 'very beautiful and painted generally in the five enamel colours.'

We find that the Buddhists had washing-jars called

*tsao kuan*[1]. The *Hsi Yü Chih* describes the washing-jar of Buddha, preserved in the Yueh-ti Country (Afghanistan), as made of blue (or green) stone, called *lo-lê*. The Preface to the Inscription upon the Washing Jar of the learned Buddhist priest, Hui Yuan, describes how he had found a bathing-jar of *mo-lo-lê* stone. In both of these passages the word *kuan* (jar) is written with radical *shui* (water), to indicate its use as a vessel for pouring water. Subsequent writers have replaced this by the radical *fou* pottery. Any small vessel used for holding things may be called a *kuan*. The *Commentary* on the *Chi chiu chang* explains the *t'o* to be a small cylindrical jar (*t'ung*) for holding salt, pulse, or honey preserves, so that the jars (*t'ung*) referred to above are the same as the ancient *t'o*.

*Lamp Brackets* (*Têng Ch'ing*).
*Rain Lamps* (*Yü T'ai*).
*Vessels* (*P'ing*) *for holding bird's food.*
*Cricket Pots* (*P'ên*).

We find that the pots (*p'ên*) of Hsüan-tê porcelain painted in gold were the most highly valued. Some of the pots made for the fighting crickets were painted in gold, as we see described in an ode included in the collected works of Wu Mei-tsun. Also, those fabricated at Su-chou by the two makers named Lu and Tsou were beautifully moulded, and artistically carved and engraved, and the pots made by the Elder and the Younger Hsiu, two daughters of Tsou, were the finest of all. At that time fighting crickets was a favourite pastime, and hundreds and thousands of cash were staked upon the event, so that they did not grudge spending large sums upon the pots, which were decorated in this elaborate way, and consequently far surpassed the ordinary porcelain of the period.

[1] The *tsao kuan* is the Buddhist washing-jar referred to before under its Sanscrit name of *kuṇḍikâ*.

*Porcelain of the Reign of Ch'êng-hua* (A. D. 1465–87).

*Cups with Stems* (*Pa Pei*) *Painted in Colours.*

*Po wu yao lan*:—'In the porcelain of the highest class of the reign of Ch'êng-hua, there is nothing to excel the high-footed cups,[1] with shallow bowl and spreading mouth, decorated with grapes painted in enamel colours, the design of which is much more perfect than that of the wine-cups of the reign of Hsüan-tê.'

*Chicken Cups* (*Chi Kang*).

The works of Kao Chiang-ts'un contain a note, explanatory of an ode of his upon three chicken-cups of Ch'êng-hua porcelain, in which he writes:—'The wine-cups of Ch'êng-hua porcelain comprise many different patterns and designs, but all are remarkable for artistic drawing, for the combination of the colours both dark and pale, and for the translucent purity and strength of the material. The "Chicken Cups" are decorated above with *mutan* peonies, below with a hen and chicken instinct with life and movement.'

According to the *Yeh huo pien* the 'porcelain of the reign of Ch'êng-hua is the most valuable, and next to it comes that of the reign of Hsüan-tê. There are several different kinds of wine-cups, and these used to be worth only a few taels, but during my present visit to the Capital (Peking), I have seen pairs of wine-cups of Ch'êng-hua porcelain sold for no less than a hundred taels of pure silver each, so that I was struck dumb with astonishment.' Again, the author of the *P'u shu t'ing chi* says: 'While staying at the Capital I used often at full and new moon to visit the fair at the Buddhist Temple Tz'ŭ-jên Ssŭ, where rich men go to buy, and I used to see on exhibition there collections of old porcelain bowls, which people thronged to look at. For those of Wan-li porcelain a few taels of silver was the price, for those marked Hsüan-tê

[1] One of these is figured as No. 17.

and Ch'êng-hua from two to five times as much, while for the chicken-cups it was of no use offering less than five twenty-tael ingots of silver. Those who had the money did not hesitate a moment, so that porcelain at this time reached a far higher price than the purest jade.'

*Bowls enamelled with jewels* (*Pao Shao Wan*).
*Cinnabar Plates* (*Chu-sha P'an*).

In the works of Kao Chiang-ts'un, in a note explanatory of an ode of his upon a vase of Chün-chou porcelain, we read:—'In porcelain of the reign of Ch'êng-hua we have the chicken wine-cups, the jewel-enamelled bowls, and the cinnabar-red plates, all of perfect artistic workmanship, the price of which is greater than that of porcelain of the Sung Dynasty.'

*Wine Cups* (*Chiu-Chan*) *painted with figure scenes and lotus flowers.*

*Wine Cups Thin as Paper* (*Chih Pao Chiu Chan*) *painted in blue and white.*

*Small Cups* (*Hsiao Chan*) *decorated with flowers and insects.*

*Shallow Cups* (*Chien Chan*) *with the five sacrificial altar utensils.*

*Little Chopstick Plates* (*Ch'i Chu Hsiao Tieh*) *painted in colours.*

*Incense Boxes* (*Hsiang Ho*).

*Small Jars* (*Hsiao Kuan*) *of diverse form.*

All of the above things are described in the *Po wu yao lan* as perfect in design and worthy of admiration.

*Wine Cups* (*Chiu Pei*) *decorated with a 'high-flaming silver candle lighting up red beauty.'*

*Brocade-Design Cups* (*Ch'in Hui Tui*).

*Cups* (*Pei*) *decorated with Swings, with the Dragon-Boat Procession, with Famous Scholars, with Playing Children.*

*Cups (Pei) with a Trellis-frame of Grapes, with Fragrant Plants, with Fish and Water-weeds, with Gourds and Aubergine Fruit, with the eight Buddhist Emblems, with the Yü-po-lo Flowers, with Indian Lotus Scrolls.*

In the works of Kao Chiang-ts'un, in a note explanatory of verses on the Chicken Cups of Ch'êng-hua porcelain, the author writes :—'Among the wine-cups of Ch'êng-hua porcelain there are some called by the name of "Flaming silver candle lighting up red beauty", with a beautiful damsel painted on them holding a candle in her hand illuminating Cydonia (*hai-t'ang*) flowers. Others called "Brocaded Cups" have medallions of flower-sprays and fruit painted on the four sides. The "Swing Cups" have a party of young girls playing with swings; the "Dragon-Boat Cups", a number of dragon-boats racing; the "Famous Scholar Cups" have Chou Mao-shou on one side admiring lotus flowers, T'ao Yuan-ming on the other with chrysanthemums beside him; the "Wa-wa Cups", five little boys playing together. Then there are the "Grape Trellis Cups", with a grape-vine growing upon a frame; and many others decorated with fragrant plants, with fish and water-weeds, with gourds and aubergine fruit, with the eight Buddhist emblems, with *yü-po-lo*[1] flowers, and with scrolls of Indian sacred lotus, &c. All of these are cleverly designed, and artistically painted with brilliant and lasting colours.'

We find in the *K'ao p'an yü shih* a description of paper-weights of Ting-chou porcelain moulded in the form of children (*wa-wa*), and of unicorn lions. *Wa* is an imitation of the sound of babies' talk, and is consequently used as a name of small children, as explained before. It is usually written with the radical *nü* (girl), and means 'good' in the dialects of Wu and Ch'u. There was a palace called 'Kuan-wa-kung' in Wu, alluded to in some verses by Yang Hsiung[2] as 'full of beautiful girls with

[1] For Sanscrit Utpala or Nila Utpala, dark-coloured lotus flowers.

[2] A philosopher referred to before, who lived 53 B. C.–A. D. 18.

jewelled tresses', the character *wa* being explained by the Commentator Shih Ku to mean here 'girls'. When used to signify 'little boys', the character ought correctly to be written with the radical *k'ou* (mouth).

*Porcelain of the Reign of Chia-ching* (A. D. 1522–66).

*Altar Cups* (*T'an Chan*).

*Po wu yao lan*:—'The little white cups (*ou*) which have written inside, and baked in, the characters *ch'a* (tea), *chiu* (wine), *tsao t'ang* (jujube tea), and *chiang t'ang* (ginger tea), are the vessels which the Emperor Shih Tsung (Chia-ching) used when he made offerings upon the altars of the Taoists. They are called by the same name of *altar cups*, but they are not equal to those of the reign of Hsüan-tê.'

We find these altar cups of three different sizes, large, medium, and small. Those with the character *ch'a* inside are the best, those with *chiang-t'ang* the worst. The best of the altar cups are of pure white colour like jade. Although they cannot rival the cups of Hsüan-tê porcelain, yet the best specimens are worthy of admiration.

*Shallow Wine Cups* (*Pien Chan*) *with Gong-shaped Mouth, Loaf-shaped Bottom, and Round Foot, enamelled with fish in three colours.*

*Small Round Boxes for 'Rouge' the size of 'Cash', with painted decoration.*

The *Po wu yao lan* describes 'these two kinds of specimens as highly valued by collectors. The little round boxes are decorated in blue and beautifully painted, and it is to be feared that even the Imperial manufactories of after-times will not be able to produce their equals.'

The following list is extracted from the Topographical Description of the Province, called *Chiang-hsi ta chih*[1], and includes:—

[1] This work and the 'General Topography of Kiangsi' (*Chiang-hsi t'ung chih*), together with the Topographies of Jao-chou Fu and Fou-liang Hsien (*Jao-chou-fu chih* and *Fou-liang-hsien chih*), all four contain

1. *Painted in Blue on a White Ground.*

Bowls (*Wan*) decorated with dragons pursuing pearls, *outside* a balance of gold and playing children.

Bowls (*Wan*) with sprays of flowers completely covering the ground inside and out.

Bowls (*Wan*) with bamboo leaves and polyporus fungus (*ling-chih*), medallions containing dragons among clouds, dragons and phoenixes flying through flowers.

Bowls (*Wan*) decorated *outside* with dragons emerging from sea-waves, holding up the eight mystical diagrams, *inside* with the three Taoist alchemists compounding the *elixir vitae*.

Bowls (*Wan*) with dragons, phoenixes, and other birds *outside*, dragons among clouds *inside*.

Bowls (*Wan*) with four fishes, mackerel, carp, marbled perch, and another, *outside*; birds flying in clouds, *inside*.

Tall Cups (*Chan*) with celestial flowers *outside*, supporting the characters *shou shan fu hai* (Old as the hills, rich as the sea); two Taoist genii *inside*.

Wine Cups (*Chiu Chan*) with a pair of dragons among clouds *outside*, dragons and clouds on a blue ground *inside*.

Cups (*Chan*) with dragons and clouds *outside*, soaring dragons *inside*.

Wine Cups (*Chiu Chan*) with dragons of antique form *outside*, storks flying through clouds *inside*.

Cups (*Chan*) with a pair of dragons painted *outside*, a pair of phoenixes *inside*.

Tea Cups (*Ou*) decorated *outside* with playing boys and the typical flowers of the four seasons, *inside* with dragons emerging from water into clouds, and flowering plants.

a book on the porcelain manufacture at Ching-tê Chên, entitled *T'ao Chêng*, 'Pottery Regulations'. The lists contained therein appear to have been sent periodically from the Imperial Household. There is one in the last edition of the 'General Topography', detailing the patterns of the porcelain required to be supplied at the time of the marriage of the last Emperor T'ung-chih. See Appendix, No. 7.

Tea Cups (*Ou*) with dragons emerging from water *outside*, lions *inside*.

Tea Cups (*Ou*) with the Emblems of the Six Cardinal Points of the Universe *outside*, soaring dragons *inside*.

Cups (*Chung*) with flowers and the inscription *fu shou k'ang ning* (Happiness, long life, health, and peace!).

Tea Cups (*Ch'a Chung*) with the myriad-flowering Wistaria inside and out, *outside* also with dragons grasping pearls in their claws.

Cups (*Chung*) with playing boys *outsiae*, dragons among clouds *inside*.

Tea Cups (*Ch'a Chung*) with dragon medallions and water caltrops *outside*, dragons and clouds on a blue ground *inside*.

Cups (*Chung*) with clouds and dragons *outside*, floral medallions *inside*.

Wine Jars (*Chiu Tsun*) decorated with the pine, bamboo, and plum.

Saucer-shaped Dishes (*Tieh*) decorated inside and out with sprays of flowers completely covering the ground.

Dishes (*Tieh*) painted inside and out with cranes flying through clouds.

Dishes (*Tieh*) with dragons *outside* surrounded by scrolls of Indian lotus, phoenixes flying through flowers *inside*.

Dishes (*Tieh*) with bundles of lotus fruit *outside*, medallions of flowers *inside*.

Dishes (*Tieh*) with bundles of lotus fruit *outside*, dragons and phoenixes *inside*.

Dishes (*Tieh*) with phoenixes flying through flowers *outside*, sporting dragons ascending and descending *inside*.

Jars with Covers (*Kuan*), with the eight precious symbols supported by stems of branching fungus (*ling-chih*).

Jars (*Kuan*) decorated with the eight Taoist immortals crossing the sea.

Jars (*Kuan*) with Pao-lao Revels (played at the New Year by children in grotesque masks).

Jars (*Kuan*) decorated with peacocks and *mutan* peonies.

Jars (*Kuan*) decorated with lions sporting with embroidered balls.

Jars (*Kuan*) with interlacing sprays of fairy flowers supporting the eight precious symbols.

Jars (*Kuan*) with a floral ground, different kinds of fish and water-weeds.

Jars (*Kuan*) decorated with the eight famous horses, the team of the ancient king Mu Wang.

Jars (*Kuan*) decorated with mountain waterfalls of the province of Ssŭ-ch'uan and flying lions.

Jars (*Kuan*) painted with waves and flames of fire, supporting the eight mystic diagrams.

Jars (*Kuan*) of octagonal form with the eight sides decorated with sea-waves and flying dragons.

Vases (*P'ing*) decorated with hoary lions and dragons.

Vases (*P'ing*) decorated with polyporus fungus and the typical flowers of the four seasons.

Round Dishes (*P'an*) decorated *outside* with the flowers of the four seasons, *inside* with three rams (*san yang k'ai t'ai*), emblematic of the revivifying power of spring.

Dishes (*P'an*) with nine dragons and flowers *outside*, clouds and dragons with sea-waves below *inside*.

Dishes (*P'an*) decorated with sea-waves and flying lions, and dragons upholding the two characters *fu shou* (Happiness and long life!).

Dishes (*P'an*) decorated *outside* with four Taoist divinities, *inside* with cranes flying through clouds.

Dishes (*P'an*) with clouds and dragons *outside*, the eight Taoist immortals worshipping the god of longevity *inside*.

Round Boxes with Covers for holding Fruit (*Kuo Ho*) decorated with dragons and cranes flying in clouds.

Boxes (*Ho*) painted with fabulous lions and dragons.

Boxes (*Ho*) decorated with dragons and phoenixes, and a group of immortals worshipping the character *shou* (longevity).

Bowls for Gold-fish (*Kang*) decorated with a pair of dragons with clouds.

Bowls for Gold-fish (*Kang*) painted *inside* with dragons and clouds.

Large Wine-Vessels of oval form (*T'an*) decorated with interlacing sprays of lotus, supporting the eight precious symbols and the eight Buddhist emblems, a gold balance, and children playing.

Oval Wine Vessels (*T'an*) decorated with interlacing sprays of lotus, supporting a hundred different forms of the character *shou* (longevity).

Referring to the *Fa hua ching*, which says that 'among the rarest things in the world there is nothing to exceed the *Yu t'an hua*', we find *Yu t'an hua* explained to be the name of an alms-bowl (*po*). This afterwards contracted to *t'an-po* is the origin of the name *t'an*. A small jar (*wêng*) is also sometimes called *t'an*. The *Ch'ün sui lu* says that 'in the present day a vessel in which wine is stored is called *t'an*, a character written also with the radical *t'u* (earth) prefixed'. Lu Kuei-mêng in a verse of thanks for some water from a mountain spring writes, 'The covered stone *t'an* has been brought to a hermit's hut', using the last-mentioned form. The characters written with radical *t'u* (earth), and with radical *fou* (pottery), as in our list, are both ancient and modern. This name *t'an* is also written with radical *wa* (earthenware), as for instance in a verse by P'i Jih-hsiu, 'The wine-jar perfumes the bamboo grove,' and in a verse by Lu yu, 'A jar full of fragrant wine of green tint'. So that this form of the character is also of ancient origin, and it is possible that the modern form of the character may be a variation of this.

### 2. *Blue Porcelain.*

Bowls (*Wan*) enamelled blue. Bowls of sky-blue colour. Bowls of turquoise blue.

Dinner Bowls (*Shan Wan*) decorated *outside* with phoenixes flying through flowers, the *inside* blue with sceptres (*ju-i*) and medallions of male and female phoenixes.

Wine Cups (*Chiu Chan*) enamelled blue.

Cups (*Ou*) decorated *outside* with lotus flowers, fishes and water-weeds, blue *inside* with a floral border interrupted by dragons, and dragons and phoenixes flying through flowers.

Tea Cups (*Ch'a Chung*) enamelled blue.

Plates (*Tieh*) enamelled blue. Plates of sky-blue colour. Plates of turquoise blue.

Plates (*Tieh*) with phoenixes and cranes engraved in the paste under the blue glaze.

Jars (*Kuan*) decorated with interlacing scrolls of fairy flowers and arabesques (*Hui-hui-hua*).

Jars (*Kuan*) with dragons engraved under the blue glaze.

Round Dishes (*P'an*) of pure blue enamel, with dragons and sea-waves *inside*, a cloud-scroll ground *outside*, with three lions or three dragons painted in gold over the glaze.

Fish Bowls (*Kang*) decorated with a pair of dragons and clouds.

Fish Bowls (*Kang*) blue outside, decorated with a pair of dragons in clouds, and scrolls of fairy flowers.

Fish Bowls (*Kang*) of monochrome first-class blue.

Oval Wine Vessels (*T'an*) decorated with a pair of dragons in the midst of clouds, surrounded by a floral ground.

Bricks (*Chuan*) of blue porcelain.

### 3. *White inside, Blue outside.*

Bowls (*Wan*) decorated with a pair of dragons in clouds.

Cups (*Chan*) decorated with a pair of dragons in clouds and flying birds.

Cups (*Chan*) decorated with the typical flowers of the four seasons.

### 4. *White Porcelain.*

Bowls (*Wan*) with crested sea-waves engraved under the glaze.

Wine Cups (*Chiu Chan*) and Libation Cups (*Chüo Chan*) with phoenixes and cranes engraved under the glaze.

Tea Cups (*Ch'a Ou*) with oval foliated rim shaped like a Buddhist gong (*ch'ing*).

Tea Cups (*Ch'a Chung*) decorated with dragons engraved under the glaze.

Wine Cups (*Chiu Chung*) of pure white glaze.

Wine Pots (*Hu P'ing*), moulded like vases with spouts, of pure white glaze.

Round Dishes (*P'an*) of pure white glaze.

Oval Wine Vessels (*T'an*) decorated with crested sea-waves engraved under the glaze.

### 5. *Brown Porcelain.*[1]

Bowls (*Wan*) with dragons engraved under a brown gold glaze.

Bowls (*Wan*) with dragons engraved under a golden yellow glaze.

Saucer-shaped Plates (*Tieh*) with dragons engraved under a gold brown glaze.

Saucer-shaped Plates (*Tieh*) with dragons engraved under a golden yellow glaze.

### 6. *Mixed Colours.*

Bowls (*Wan*) and Saucer-shaped Plates (*Tieh*), enamelled with vermilion-red of iron oxide (*fan-hung*), instead of the bright copper-red (*hsien-hung*).

Bowls (*Wan*) and Saucer-shaped Plates (*Tieh*) enamelled peacock-green.

Bowls (*Wan*) with blue ground, surrounding yellow phoenixes flying through scrolls of fairy flowers.

Cups (*Ou*) with yellow enamelled ground, inclosing blue clouds and dragons.

[1] Père d'Entrecolles seems to be wrong in saying that the brown or coffee-coloured glaze was a new invention at the time he wrote (1712), as we have it here in both its lighter and darker shades, and it is also not uncommon on jars of the reign of Wan-li.

Wine Cups (*Chan*) and Libation Cups (*Chüo*) with blue ground, surrounding yellow phoenixes flying through fairy flowers.

Boxes with Covers (*Ho*) with dragons and phoenixes engraved under a yellow glaze.

Round Dishes (*P'an*) and Plates (*Tieh*) with brown gold ground surrounding a pair of dragons in clouds enamelled yellow.

Bowls (*Po*) of globular form and plain decoration.

In the Chronicles of the Wei Dynasty it is recorded that 'the Emperor presented to Nü Wo brocaded silk with interlacing dragons on crimson ground'. The dictionary *T'ung ya* says that every brocade must have a ground, and that P'ei Sung-chih, who wished arbitrarily to change the character used to another meaning silk, made a ridiculous error. Again, during the Sung Dynasty the Emperor Jên Tsung is recorded to have decreed in the period Ching-yu (A. D. 1034–37) that dragons and kilin should be worked upon dark blue gauze to decorate the Emperor's ceremonial hat, the intermediate space being filled in with dragons and clouds in gold.

Porcelain enamelled in colours was painted in imitation of the fashion of brocaded silks, and we have consequently the names of blue ground, yellow ground, and brown gold ground. The designs used to decorate it were also similar, and included coiling dragons, clouds and phoenixes, kilin, lions, mandarin-ducks, myriads of gold pieces, dragon medallions, pairs of phoenixes, peacocks, sacred storks, the fungus of longevity, the large lion in its lair, wild geese in clouds with their double nests, large crested waves, phoenixes in the clouds, the son-producing lily, the hundred flowers, phoenixes flying through flowers, the band of eight Taoist immortals, dragons pursuing pearls, lions playing with embroidered balls, water-weeds and sporting fish. These are the names of ancient brocades, all of which the Imperial potters, in designing and colouring porcelain, have reproduced more or less exactly.

*Porcelain of the Reign of Lung-ch'ing* (A. D. 1567–72).

Painted in blue on a white ground. List extracted from the Section on Porcelain entitled *T'ao Shu*, in the Official Topographical Statistics of the District of Fou-liang (*Fou-liang Hsien Chih*).

Dinner Table Services (*Cho Ch'i*) decorated with a pair of dragons in clouds, phoenixes in red clouds flying through flowers, a joyous meeting (symbolized by a pair of magpies), variegated pheasants, bunches of chrysanthemum blossoms, interlacing scrolls of fairy flowers, *ling-chih* fungus and grapes.

Referring to the *Ch'ing yi lu*, we read that during the Five Dynasties (A. D. 907–60) rich men vied with each other in increasing the magnificence of their banquet services, till a table ten feet square was not large enough to hold all the things, and two others had to be attached as wings. These complete table services of dishes and other things were composed of several hundred pieces large and small.

Again we see in the *Pei yuan lu*, that when, in the cyclical year *ping-shên* (A. D. 1176) of the period Ch'un-hsi, Chang Tzŭ-ch'êng was sent as a special envoy to the Chin Tartars, to congratulate their Sovereign on the occasion of his birthday, he found on his arrival at the Hotel the supper prepared, with the tea, wine, and other services set out all made of *wa-lung* (porcelain ?). This referred to the table service for a full banquet. With regard to a complete table service of porcelain with the colour and pattern all alike, this is first to be met with in the pottery of the Ming Dynasty, since which time they have become universal. The ancients used a small low table placed upon the mat, and the modern high square table is a development of this. Yang Yi says in the *T'an Yuan* that during the periods Hsien-p'ing and Ching-tê (A. D. 998–1007) the Emperor had chairs and tables made for his palace of sandal-wood. After this time the characters *yi* (chair) and *cho* (table) were written with the radical *mu*

(wood). The modern form of *cho* (table) with a second *mu* (wood) prefixed is a vulgar form.

Bowls (*Wan*) decorated *outside* with dragons and phoenixes flying through flowers, and bands of floral ground and separate sprays of blossom painted in five colours; *inside* with medallions of dragons and phoenixes, the pine, bamboo, and plum, and iris flowers.

Round Dishes (*P'an*) decorated *outside* with pairs of dragons and phoenixes in clouds, nine dragons and sea-waves, interlacing scrolls of fairy flowers; *inside* with figure scenes, *ling-chih* fungus, and the typical flowers of the four seasons.

Saucer-shaped Plates (*Tieh*) decorated *outside* with pairs of dragons and phoenixes in clouds, bamboo leaves and *ling-chih* fungus, cloud medallions inclosing dragons, the pine, bamboo, and plum; *inside* with dragon medallions and the typical flowers of the four seasons.

Cups (*Chung*) decorated *outside* with pairs of dragons in clouds, hibiscus (*fu-jung*) flowers, a joyous meeting (of magpies), interlacing scrolls of foreign pomegranates, and arabesque designs; *inside*, with pheasants flying through flowers, blue-pied ducks, lotus flowers, figure scenes, lions, historical subjects, a gold balance, and of yellow monochrome glaze with dragons engraved in the paste.

Cups (*Ou*) decorated *outside* with dragons and phoenixes flying through flowers, the eight Buddhist emblems, five dragons and light sea-waves, the flowers of the four seasons supporting the four characters *ch'ien k'un ch'ing t'ai* (May heaven and earth be fair and fruitful!), the eight immortals propitious to long life, the sacred lotus of India; *inside* with flying fish, nine dragons in red in the midst of blue sea-waves, fish, the pine, bamboo and plum, dragons and phoenixes flying through flowers.

Jars (*Kuan*) with pairs of dragons flying through clouds, phoenixes and flowers, lions playing with embroidered balls, interlacing scrolls of *mutan* peonies, blue flowers and fruit and flying birds, dragons in clouds painted in the five colours, trailing fairy flowers, plants and insects.

Vases (*P'ing*) decorated with dragons and phoenixes flying through flowers, children playing, with branches in their hands, jasmine flowers, arabesque designs and fairy flowers.

Cups (*Chan*) decorated *outside* with soaring dragons, the *ling-chih* fungus, curling waves painted in the five colours, plum blossom; *inside*, with dragons and clouds, althaea flowers, the pine, bamboo, and plum, and white with dragons and clouds engraved under the glaze.

Basins (*P'ên*) decorated *outside* with dragons and clouds, a ground completely covered with flowers painted in the five colours, familiar scenes, historical subjects, lotus flowers and dragons; *inside*, with clouds and dragons, curling waves, and plum blossom.

Incense-burning Vessels (*Hsiang Lu*) decorated with pairs of dragons in clouds, arabesque designs, fruit and flying birds, nine dragons, light sea-wave borders and lotus flowers, pairs of dragons in clouds painted in red, and interlacing scrolls of fairy flowers.

Incense Boxes (*Hsiang Ho*) decorated with pairs of dragons soaring into the clouds, the pine, bamboo, and plum, scattered bunches of chrysanthemum flowers.

Slop Basins of square form (*Cha Tou*) decorated with pairs of dragons in clouds, phoenixes, and flowers, monsters in the midst of sea-waves, lions playing with embroidered balls, joyous meeting (of magpies), and pheasants flying through flowers.

Referring to the dictionary *Kuang yün*, we find *cha* defined as the dregs of a decoction of drugs, also as applied to the remnants of food, and these *tou* were receptacles for such remnants. *Cha* is commonly written with another phonetic and the radical *shui* (water) prefixed.

Vinegar Bottles (*Ts'u Ti*) decorated with pairs of dragons in clouds, phoenixes and flowers, monsters in the midst of sea-waves, pheasants flying through flowers, lions playing with embroidered balls, scattered sprays of the typical flowers of the four seasons.

Oval Wine Vessels (*T'an*) decorated with pairs of dragons

and phoenixes in clouds, wild animals and trees, flying fish, the typical flowers of the four seasons, the eight Buddhist emblems, peacocks, and *mutan* peonies painted in gold. With covers (*Kai*) ornamented with lions moulded upon them.

*Porcelain of the Reign of Wan-li* (A. D. 1573–1619).

1. *Painted in Blue on a White Ground.*

Bowls (*Wan*) decorated *outside* with pairs of dragons and phoenixes in clouds and lotus flowers, with interlacing sprays of Indian lotus and fairy flowers; *inside* with medallions of dragons and clouds, the eight Buddhist emblems bound with fillets and dragon border, crested bands of sea-waves, *ju-i* sceptres and cloud-scroll borders, fragrant flowers, curling waves and plum blossom.

Bowls (*Wan*) decorated *outside* with clouds and dragons, lotus flowers, fish, playing boys, the four characters *fu shou k'ang ning* (Happiness, long life, prosperity and peace!) in antique seal script, arabesque designs, sea monsters, lions playing with embroidered balls: *inside*, with cranes and clouds, a single spray of lotus, lily flowers, *ju-i* sceptres and clouds; with the inscription *Ta Ming Wan li nien chih* (Made in the reign of Wan-li of the Great Ming Dynasty).

Bowls (*Wan*) decorated *outside* with medallions of dragons and clouds, pairs of phoenixes, the eight precious symbols on a brocaded ground, sea-waves, Fu, Lu, and Shou (the gods of happiness, rank and long life), and branching fungus; *inside*, with pairs of dragons holding up longevity characters in their claws, jasmine flowers, and phoenixes, painted in the five colours, flying through the typical flowers of the four seasons.

Bowls (*Wan*) decorated *outside* with longevity symbols, autumnal fruits, midsummer holiday symbols (acorns and artemisia, hung up on the fifth day of the fifth moon), lotus flowers, water-weeds and fish; *inside* on a blue ground, with borders of full-faced dragons and clouds, with the pine, bamboo, and plum.

Bowls (*Wan*) decorated *outside* with pairs of dragons in

clouds, the eight Taoist immortals crossing the ocean, boxes of the typical flowers of the four seasons; *inside* with full-faced dragons, antique longevity characters, *ju-i* sceptres and althaea flowers; with borders of bamboo leaves and branching fungus.

Round Dishes (*P'an*), decorated *outside* with cloud dragons and phoenixes flying through flowers, interlacing sprays of fairy flowers, the pine, bamboo, and plum; *inside* with branches of the typical flowers of the four seasons, arabesque designs and garlands of fruit, *ju-i* sceptres, the pine, bamboo, and plum; with *borders* of bamboo leaves and polyporus fungus.

Round Dishes (*P'an*) decorated *outside* with lotus flowers and dragons, dragons and phoenixes flying through flowers, the pine, bamboo, and plum, familiar scenes and historical subjects with inscriptions in verse, playing boys; *inside* with borders of cloud masses, fragrant bamboo leaves and branching fungus, and with dragons among clouds and fairy flowers engraved under the glaze.

Round Dishes (*P'an*) decorated *outside* with medallions of fabulous animals and tigers, the *ling-chih* fungus, *ju-i* sceptres, fairy flowers, foreign pomegranates and fragrant plants; *inside* with dragons in the centre holding the characters *yung pao wan shou* (Ever protecting for a myriad ages), and phoenixes with fairy flowers on the border, with the inscription *yung pao hung fu ch'i t'ien* (Ever ensuring abundant happiness reaching to the heavens), and with playing boys.

Round Dishes (*P'an*) decorated, *outside*, with interlacing sprays of lotus surmounted by the eight precious symbols, dragons and phoenixes, flowers and fruit, the pine, bamboo and plum, Sanscrit *dharani*, branches of the typical flowers of the four seasons; *inside*, in the centre, dragons surrounded by flowers, on the border, scattered sprays of the flowers of the four seasons, figure scenes, and historical subjects, bamboo leaves, branching fungus, longevity inscriptions and *mutan* peonies.

Saucer-shaped Plates (*Tieh*) decorated *outside* with

phoenixes flying through flowers, flowers and fruit, birds, floral brocaded ground, trees and wild animals, lotus leaves and dragons; *inside* with the eight precious symbols, antique dragons, celestial flowers supporting Sanscrit invocations, dragons and phoenixes, familiar scenes and historical subjects.

Plates (*Tieh*) decorated *outside* with interlacing sprays of peonies supporting the eight precious symbols, crested waves, Indian lotus flowers, fabulous monsters in the five enamel colours, floral brocade designs; *inside*, with pairs of dragons among clouds, dragons and phoenixes engraved under the glaze, fairy flowers, lions sporting with embroidered balls, the eight Buddhist emblems, *ju-i* sceptres and cloud scrolls, *ling-chih* fungus, flowers and fruit.

Plates (*Tieh*) decorated *outside* with jasmine and interlacing sprays of fairy flowers, fabulous monsters and tigers, the *ling-chih* fungus; *inside*, with dragons and phoenixes in enamel colours; on the *borders*, the inscription *fu ju tung hai* (Rich as the eastern ocean), the eight Buddhist emblems, brocaded vases, bands of fairy flowers, and ribbons with the eight precious symbols.

Plates (*Tieh*) decorated *outside* with interlacing bamboo leaves and *ling-chih* fungus, flowers and fruit, the eight precious symbols, pairs of dragons and phoenixes; *inside*, with dragons in the midst of typical flowers of the four seasons, longevity inscriptions painted in enamel colours, familiar scenes, fairy peach-trees and borders of grapes.

Cups (*Chung*) decorated *outside* with pairs of dragons in clouds, foreign pomegranates with fillets of ribbon, lions playing with embroidered balls; *inside*, with dragons flying through flowers, *ju-i* sceptres and cloud-scrolls; on the *borders*, fragrant plants, nine dragons painted red in the midst of blue sea-waves, water-birds painted in enamel colours, lotus flowers, and with Buddhist invocations in Sanscrit characters round the rims.

Cups (*Chung*) decorated *outside* with the peach-tree of Taoist fable with antique longevity characters inscribed on the fruit, interlacing sprays of flowers of the four

seasons, Sanscrit invocations; *inside*, with storks flying in clouds, pearls emitting flames of fire, pairs of dragons in clouds engraved under the glaze, lotus flowers and fish in azure waves.

Cups (*Ou*) decorated *outside* with dragons and phoenixes surrounded by flowers, the eight immortals worshipping the god of longevity, arabesques and interlacing sprays of fairy flowers; *inside*, with medallions of dragons in clouds, lotus flowers and fish, river reeds, and flowers beneath Sanscrit invocations.

Cups (*Ou*) decorated *outside* with dragon medallions, *ju-i* sceptres and clouds, bamboo leaves and *ling-chih* fungus, with fish and water-weeds painted in enamel colours; *inside*, with antique longevity characters, *ju-i* sceptres, *mutan* peonies, and with *ju-i* sceptres in enamel colours.

Cups (*Chan*) decorated *outside* with clouds and dragons, jasmine flowers, flying birds, noble ladies, playing children, branches of *ling-chih* fungus supporting the eight Buddhist emblems; *inside*, with grapes, sprays of flowers of the four seasons, Sanscrit *dharani* and longevity garlands.

Cups (*Chan*) decorated *outside* with pairs of dragons in clouds surrounded by flowers, figure scenes and historical subjects, nine blue monsters in the midst of red sea-waves; *inside*, with *ju-i* sceptres and fragrant plants, plum flowers on a wavy ground, pheasants flying through flowers, and red sea-waves with white crests.

Cups (*Chan*) decorated *outside* with pairs of dragons in clouds and phoenixes; *inside*, with yellow hibiscus flowers, interlacing branches of *ling-chih* fungus and chrysanthemum flowers painted in enamel colours.

Boxes (*Ho*) decorated with *ju-i* sceptres and dragons in clouds, dragons and phoenixes flying through flowers, the inscription *fêng t'iao yü shun, t'ien hsia t'ai p'ing* (May the winds be propitious and the rain favourable and peace prevail throughout the world!), a head with the hair dressed in four puffs inscribed *yung pao ch'ang ch'un* (Ever-preserving lasting spring!), the eight mystic diagrams with the *yin* and *yang* symbol, figures of deities holding

the characters *ch'ien k'un ch'ing t'ai* (May Heaven and Earth be fair and fruitful!).

Boxes (*Ho*) decorated with fabulous monsters in attendance on the celestial dragon, *ju-i* sceptres and cloud-scroll brocades, floral ground designs, hibiscus flowers upon a brocaded ground, musical instruments (*fang-shêng*), flowers and fruit, flying birds, flowering plants and insects.

Boxes (*Ho*) inscribed *Wan ku ch'ang ch'un, Ssŭ hai lai ch'ao* (Through an everlasting spring of a myriad ages, May tribute come from the four seas!), decorated on the covers with dragons, the typical flowers of the four seasons, figure scenes and historical subjects.

Boxes (*Ho*) inscribed *T'ien hsia t'ai p'ing* (Peace throughout the world!), decorated with fragrant plants from the four quarters and *ju-i* sceptres, and on the covers with arabesque designs and figure scenes and *fang-shêng* musical instruments painted in colours.

Boxes (*Ho*) decorated with figure scenes and historical subjects, on the covers, with dragons and clouds, playing boys, the typical flowers of the four seasons, dragons and clouds painted in enamel colours, flowers, fruit, and birds, branches of *ling-chih* fungus supporting antique longevity characters.

Wine Cups (*Pei*) decorated *outside* with winged lions flying through sea-waves, interlacing sprays of flowers of the four seasons, jasmine flowers, monsters and tigers, *ling-chih* fungus and pomegranates; *inside*, with hibiscus flowers and *mutan* peonies, sea-waves and fairy flowers.

Wine Cups (*Pei*) and Dishes (*P'an*) decorated *outside* with *mutan* peonies, golden chrysanthemums, hibiscus flowers, dragons and phoenixes, the typical flowers of the four seasons, with the eight precious symbols painted in enamel colours, grapes, and bees hovering round a blossoming plum; *inside*, with hibiscus flowers, *mutan* peonies, lotus flowers painted in enamel colours and ancient coins.

Chopstick Saucers (*Chu P'an*) decorated *outside* with

dragons in clouds and sea-waves; *inside*, with dragons and clouds worked in relief.

Wine Bowls, *literally* 'Wine Seas' (*Chiu Hai*), decorated with interlacing sprays of golden lotus flowers supporting antique longevity characters.

Incense Burners (*Hsiang Lu*) decorated with the eight diagrams and the symbol of heaven and earth, branches of *ling-chih* fungus, landscape scenes, clouds and dragons.

Incense Burners (*Hsiang Lu*) decorated outside with lotus flowers, fragrant plants and *ju-i* sceptres, clouds and dragons worked in relief, arabesque designs and fragrant plants, dragons in clouds, *ling-chih* fungus, with fairy flowers executed in open-work, branching fungus and ancient coins.

Vases (*P'ing*) decorated with dragons and phoenixes flying through flowers, trees and wild animals, ginseng and polyporus fungus, brocades and pheasants, *mutan* peonies, cranes flying in clouds, the eight mystic diagrams, the hemp-leaved Indian lotus.

Vases with broad mouths (*Hu P'ing*) decorated with dragon medallions, the typical flowers of the four seasons, the Indian lotus supporting Sanscrit invocations, phoenixes flying through flowers of the four seasons, grapes and sliced water-melons, dragons in clouds holding up the characters *shêng shou* (wisdom and long life), apricot leaves, water-weeds and gold-fish painted in the five enamel colours.

Flower Vases (*Hua P'ing*) in the form of a double gourd (*hu-lu*) cut in halves (so as to hang on the wall), decorated with dragons and clouds, reeds and wild geese, the pine, bamboo, and plum.

Flower Vases (*Hua P'ing*) decorated with flowers and fruit, birds, flowering plants and insects, figure scenes, historical subjects.

Flower Vases (*Hua P'ing*) decorated with phoenixes flying through the flowers of the four seasons, covered with a full floral ground, with dragons painted in enamel colours flying through the flowers of the four seasons,

branches of *ling-chih* fungus supporting the eight precious symbols, strings of jewels and fragrant plants.

Jars with Covers (*Kuan*) decorated with landscapes with hills and water, flying lions, dragons in the midst of clouds, peacocks and *mutan* peonies, the eight Taoist immortals crossing the ocean, the four lights worshipping the star of longevity, the six cranes of the cardinal points of the universe, and with figure scenes and historical subjects painted in enamel colours.

Slop Receptacles (*Cha Tou*) decorated with pairs of dragons in the midst of clouds surrounded by flowers, and a joyful meeting, symbolized by a flock of magpies.

Slop Receptacles (*Cha Tou*) decorated with dragons and clouds, arabesque designs, fragrant plants, figure scenes, historical subjects, flowers and fruit and polyporus fungus.

Vinegar Bottles (*Ts'u Ti*) decorated with pairs of dragons in clouds and interlacing scrolls of fairy flowers.

Gobang Boards (*Ch'i P'an*) decorated with clouds and dragons.

The chess-board (*ch'i-p'an*) is also called *wên-ch'iu* (chequered catalpa), its ancient name being *ch'iu-p'ing* (catalpa board). In the *Ch'i t'ien tung lan* it is related that the chess-board of Yuan Yi-pên resounded with regular musical notes, meaning that he used one made of resonant jade, not that he was playing upon a new musical instrument. So also a board made of porcelain would give out a tinkling (*ting-ting*) sound, somewhat resembling that produced by musical jade.

Hanging Oil Lamp (*Ching T'ai*) decorated with sea-waves and dragons in clouds, the typical flowers of the four seasons, golden chrysanthemums and hibiscus flowers.

Pricket Candlesticks (*Chu T'ai*) decorated with six cranes for the cardinal points of the universe, *ling-chih* fungus, the eight precious symbols, twining fairy flowers, *ju-i* sceptres and dragons in clouds.

Pricket Candlesticks (*Chu T'ai*) decorated with jewel mountains, sea-waves and dragons in clouds, medallions

with boys carrying twigs of olea fragrans in their hands seated inside, water plants, lotus leaves and flowering plants.

Jars with Nozzles for Oil-wicks (*Chien Chu Kuan*) decorated with dragons in clouds and phoenixes flying through the flowers of the four seasons.

Screens (*P'ing*) decorated with a brocaded ground, flowers, fruit, and birds, with borders of pairs of dragons grasping pearls in their claws.

Pencil-Brush Handles (*Pi Kuan*) decorated with brocaded grounds, fairy flowers enveloped by clouds, the *ling-chih* fungus, the river pictures and writings of ancient story.

Wang Hsi-chih, the author of the *Pi Ching*, says there that 'handles for pencil-brushes used in former times to be made either of glass or of ivory, and sometimes most elaborately ornamented. But writing-pencils ought to be light and easily handled, and not so heavily overweighted, and therefore in our own times the handles are made of bamboo coated with green lacquer, or carved when it is desired to send them as presents, and these are more highly appreciated than if made of gold or precious jade'. These words show a correct knowledge of the three essentials of the art of writing. Porcelain handles are also, I fear, too heavy for pencils.

Pencil Barrel-shaped Holders (*Pi Ch'ung*) decorated with the eight precious symbols and dragon medallions.

We find that Wang Hsien-chih[1] possessed a pencil-barrel made of spotted bamboo, which he called his fur bell, and which was unrivalled in his day. According to the *K'ao p'an yü shih*, pencil-barrels made of Hsiang bamboo are most sought after. These are not the only artistic ones, however, for in modern times there is a large variety made of porcelain and beautifully finished. Yet such designs as those described above of precious symbols

[1] Youngest son of the Wang Hsi-chih just quoted, and celebrated like his father as a scholar and calligrapher (A. D. 344–88).

and dragon medallions are, I fear, unsuitable for simple ornament.

Perfume Boxes (*Hsiang Lien*) decorated with kilin (*ch'i-lin*), the inside of the boxes with twining sprays of fairy flowers, spiral scrolls, flowers and fruit, the eight Buddhist emblems, branching fungus, sea-waves and plum blossom.

We find in the *Chi chiu chang* a description of barrels (*t'ung*) used for holding natural perfumes, prepared scents, rouge, white powders and pomades, with an explanatory note that these barrels were originally made of bamboo, a material afterwards displaced by metal and jade, the objects still, however, being made in the shape of segments of bamboo, so as to be used for holding pomades. So in my own humble opinion perfume boxes of porcelain should be made in the ancient style, in imitation of natural bamboo, of different diameter and height, according to their intended use, and they would be thus well adapted for cultured ornament.

Fan Boxes (*Shan Hsia*) decorated with dragons in the midst of clouds, and arabesque designs.

Pencil Rests (*Pi Chia*) decorated with sea-waves, three dragons, and landscapes, in high relief and carved in open-work.

Pallet Water Holders (*Yen Shui Ti*) decorated with couchant dragons, elephants carrying jewelled vases, and figure scenes.

Betel-nut Caskets (*Pin-lang Lu*) decorated with figure scenes, historical subjects, fragrant plants, and lotus blossom.

Hat Cases (*Kuan Lu*) decorated with a brocaded ground, the interior of the box with dragons, surrounded by the typical flowers of the four seasons.

Handkerchief Boxes (*Chin Lu*) decorated, *outside*, with brocade ground designs, pairs of dragons holding the inscription *Yung pao ch'ang shou, ssŭ hai lai ch'ao* ('Ever preserving long life, tribute arriving from the four seas!'),

figure scenes, historical subjects, and the typical flowers of the four seasons; *inside*, with the *ling-chih* fungus, the pine, bamboo and plum, and orchids.

Summer Garden Seats (*Liang Tun*) carved in pierced work with pairs of dragons grasping pearls, flying dragons, lions and sea-horses.

Oval Wine Vessels (*T'an*) decorated with propitious clouds, a hundred dragons, a hundred storks, with a hundred deer painted in enamel colours and the inscription *Yung pao ch'ien k'un* ('Ever protecting heaven and earth!')

Fish Bowls (*Kang*) decorated with water-weeds and fish, the eight precious symbols, fragrant plants, lotus flowers, a complete floral ground, sea-waves and plum-blossom.

### 2. *Painted in Enamel Colours.*

Chess Boards (*Ch'i P'an*) decorated with dragons and clouds.

Pencil-Brush Handles (*Pi Kuan*) decorated with dragons in the midst of clouds rising from out of sea-waves.

Pencil Barrels (*Pi Ch'ung*) decorated with dragons and sea-waves, circular ornaments, and the typical flowers of the four seasons.

Flower Vases (*Hua Tsun*) decorated with bands of *ju-i* sceptre ornament, landscapes, and *ling-chih* fungus.

Pricket Candlesticks (*Chu T'ai*) decorated with jewel mountains and sea-waves, dragons and clouds, figure scenes, historical subjects, fragrant flowers, and lotus blossom.

Jars with Nozzles for Oil-wicks (*Chien Chu Kuan*) decorated with dragons in clouds and phoenixes flying through the flowers of the four seasons.

Fish Bowls (*Kang*) decorated with flowers interrupted to contain landscapes, ascending and descending dragons, and pairs of phoenixes surrounded by blue clouds.

Perfume Boxes (*Hsiang Lien*) decorated with fragrant plants carved in open-work, with fir-leaf brocades, and with the typical flowers of the four seasons.

Jars with Covers (*Kuan*) decorated with brocaded ground in round patterns, the typical flowers of the four seasons, fruit and birds, and the eight precious symbols.

Fan Cases (*Shan Hsia*) decorated with clouds and dragons and arabesque designs.

Pencil Rests (*Pi Chia*) decorated with landscapes in pierced work.

Handkerchief Boxes (*Chin Lu*) decorated with the typical flowers of the four seasons.

Slop Basins (*Cha Tou*) decorated with dragons and clouds, scroll designs, and the typical flowers of the four seasons.

Fish Bowls (*Kang*) decorated with dragons soaring into the clouds, arabesque designs and fragrant plants.

### 3. *Painted in Mixed Colours.*

Cups (*Ou*) white inside, decorated outside with ribbons and foreign pomegranates on a blue ground.

Bowls (*Kang*) white inside, a blue ground outside with pairs of dragons in clouds, lions playing with embroidered balls, interlacing sprays of golden lotus and fairy flowers.

Pencil Barrels (*Pi Ch'ung*) with blue ground ornamented with white flowers, and white dragons coiling through flowers of the four seasons.

Oval Wine Vessels (*T'an*) with blue enamelled ground, ornamented with pairs of dragons in clouds grasping antique *shou* (longevity) characters, winged thread-like dragons flying through *ling-chih* fungus, trees and wild animals, figure scenes, historical subjects, and with the picture of the hundred boys.

Garden Seats (*Liang Tun*) decorated with lotus flowers and dragons in clouds painted in the five enamel colours, and with brown lotus flowers on a yellow ground.

Tea Cups (*Ch'a Chung*) enamelled yellow inside and out, with dragons in the midst of clouds and fairy flowers, engraved in the paste under the glaze.

Incense-burning Vessels (*Hsiang Lu*) with yellow ground painted in five colours: the inside white, the outside

decorated with fabulous monsters and tigers, the *ling-chih* fungus, the typical flowers of the four seasons, fragrant plants, and arabesque designs.

Vases (*P'ing*) of white porcelain with phoenixes, male and female, and fairy flowers engraved under the glaze.

Banquet Dishes (*Shan P'an*) enamelled white inside, decorated outside with dragons and clouds painted in red, green, yellow, and brown.

The above lists are also extracted from the *T'ao Shu*.

*Seal-vermilion boxes (Yin Ch'ih) of oblong shape fabricated in imitation of white Ting-chou porcelain.*

*K'ao p'an yü shih*:—'Among the things made in recent times there are the oblong seal boxes copied from those of white Ting-chou porcelain, as well as others painted in blue on a white ground, or entirely white, such as did not exist in ancient times, which are eagerly sought for, especially specimens between six and seven inches long, that being the size preferred.

*Incense-burners (Lu) like the ancient bronze vessels dedicated to Wên Wang (of the Chou Dynasty) and like the ancient sacrificial Vessels called Yi. Imitations of Ting-chou porcelain.*

*Po wu yao lan*:—'The recent imitations of Ting-chou porcelain, the incense-burners, copied from the *ting* dedicated to Wên Wang for example, and the incense-burners modelled after the ancient bronze vessels called *yi*, with mask-handles of animals' heads or halberd-shaped ears, are in no way inferior to those formerly made by the potters of Ting-chou [1], so that they might even be mistaken for genuine specimens. Those of the original manufacture of Chou Tan-ch'uan are the best, and after they have been submitted to thorough friction, to remove the new gloss of the fire from their surface, they will be an ornament to the library. The pieces fabricated by the successors of

[1] See Figures 3 and 4.

Chou, the box-shaped incense burners with covers, and the barrel-shaped incense burners, decorated with chain armour, with ball and gate brocaded designs, and with tortoiseshell markings scattered all over the surface, these are too elaborately ornamented to be fit for a simple scholar, and yet far from rivalling the handiwork of Tan-ch'uan.'

*Dawn-coloured Wine Cups* (*Liu hsia Chan*).

*Ch'ih pei ou t'an*:—'In special branches of artistic work of recent times the most skilful craftsmen are P'u Chung-ch'ien for carved bamboo, Chiang Ch'ien-li for mother-of-pearl, Chang Ming-ch'i for the copper incense-burners of Chia-hsing Hsien, Shih Ta-ping for the earthenware tea-pots of Yi-hsing, Hao Shih-chiu for the dawn-red cups of Fou-liang Hsien. These are all names well-known throughout the empire.'

*Egg-shell Wine Cups* (*Luan-mu Pei*).

*Chü yi lu*:—'The porcelain fabricated at Fou-liang Hsien in the reign of Wan-li by Hao Shih-chiu was of perfect design and surpassing beauty. The egg-shell wine-cups which he made are of translucent whiteness and delicate fabric, each one weighing not more than half a *chu*[1].

We find that Hao Shih-chiu called himself Hu Yin Tao-jên, because he devoted all his genius to the fabrication of porcelain. The *Chü yi lu* records also that he was clever in making verses, which he composed in the style of Chao, President of the Han-lin College (in the Yuan Dynasty). He was simple and not covetous of gain and used to live in a hut, with a mat for a door, and a broken jar for a window, yet he was a man of culture and not to be dismissed as celebrated for this one art only.

Fan Yü-hêng sent to him the following verse:—'The porcelain of Hsüan-tê is very thin, that of Yung-lo thick. The skill of Hao Shih-chiu is celebrated throughout the

[1] The *chu* is the twenty-fourth part of a tael, and half a *chu* would be equivalent to less than a gramme.

empire. I look to him for another of his elegant and touching poems and turn in my thoughts to his home under the Kuang-lu Hills.'

Li Jih-hua writes to him another verse:—'Searching for the philosopher's stone you contend in the market-place. Instead of the rustling pines and changing clouds your heaven is the teapot. I know you, Sir, as the maker of the dawn-red wine-cups, which might be started from the orchid arbour[1] to float down the nine-bend river.'

I will venture myself to send a verse after him and write it at the end of my book:—'The elder and younger brothers of Lung-ch'üan have long been celebrated. But the porcelain of modern times is comparatively so much dirt. Except when the red clouds of dawn rising over the great river gave inspiration to a poet hiding his lofty genius in a teapot.'

[1] The Orchid Pavilion (*Lan T'ing*) was a celebrated place at Kuei-chi in the province of Chêkiang, where a party of scholars used to meet to drink wine and compose verses in the fourth century. The scene with the cups floating down the river has been a favourite subject for Chinese artists ever since.

# SECOND PREFACE

## By Chu Wên-tsáo.

The above Description of Porcelain, in Six Books, is the work of my kinsman the learned Li-t'ing. The accomplished author has seen much and has besides made wide research, so that his descriptions are full and reliable. He resided a considerable time at Jao-chou. Among the productions of Jao-chou, there is nothing to rival the porcelain made at Ching-tê Chên, and, this being an article of daily consumption, there can be no intermission in the work. As he has seen with his own eyes all the processes of manufacture, and has carefully quoted older authorities, his book is based on solid foundations, and will not fail to last. I, Wên-tsao, although naturally not clever, am very fond of reading old books. In the one department of porcelain, however, our predecessors have really written no special book, so that this may be considered the first work on the subject.

I will humbly venture to try from my own reading to add a few supplementary notes. In the period Chêng-kuan (A. D. 627–49), during the reign of the second Emperor of the T'ang Dynasty, the plain porcelain made at Hsin-p'ing Chên, in our native Hang-chou, was celebrated throughout the empire, although the site of the factory has long been forgotten, and only the record survives. The teapots made at Yi-hsing by Kung Ch'un were distributed to every place within the four seas, and these are worthy of description. So also the hundred and eight wine-vessels in the collection of Wu Hsiu-ku of Wu-lin, in honour of which all the famous scholars of the time composed verses, might be included, and their form and decoration described, to make the work complete. Yang Yung-chien, when he was Chung-ch'êng (Governor of the Province of Kiangsi) acted as Superintendent of the Imperial Factories, as may be seen by referring

to his collected works, so that his name also should not be omitted. Coming now to the question of writing upon porcelain, Shao Yuan-p'ing of Jên-ho Hsien forbad it, wishing specially to reverence the sages and show affection for the written character. In the reign of Shih Tsung (Yung-chêng, A. D. 1723–35) a petition was presented to the Emperor, recommending that the date of the reign should be inscribed, to be handed down to future ages, but the Imperial decree was adverse to the memorial. The proper arrangement of my notes must await further leisure, but they shall presently be completed and published for the correction of scholars. The accomplished author is devoted to study and attached to antiquity, and I, Wên-tsao, have long striven to emulate him. I have not yet been so fortunate as to make his acquaintance, but I have perused his learned work, and now beg to offer for his acceptance these remarks. I know that though a great scholar he is modest withal and that he will not blame the presumption of my humble stupidity.

A respectful preface written by me, Wên-tsao, in the middle month of spring of the cyclical year *chia-wu* (A. D. 1774), the thirty-ninth of the reign of the Emperor Ch'ien-lung.

## THIRD PREFACE

By Pao T'ing-po.

There is a large mass of literature extant in the present day, but with regard to books upon manufactures, although in the Historical Annals of the Han, Sui, T'ang, and Sung Dynasties one or two works are mentioned, like the classical book on lacquer by Chu Tsun-tu, and that on casting money by Tu Hao, the authors on ancient handiworks are very few in number. The *Po ku t'u* of the period Hsüan-ho, and the *K'ao ku t'u* by Lü Yu-shu, comprise an extensive series of figures and descriptions of the forms and inscriptions of ancient bronze sacrificial

dishes and wine-vessels, but contain no reference to the articles in daily use among the people. During the late Ming Dynasty (A. D. 1368–1643), the 'Description of the Sacrificial Vessels of the period Hsüan-tê' (A. D. 1426–35), by Lü T'ang, the 'Records of Casting in Iron', by Fu Ch'un, and the 'Account of Salt Manufacture in Ancient and Modern Times', by Wang K'o-yü, were all books written by officials who had actual charge of the work described by them.

It is only in the one art of porcelain that I know of no special author, either in ancient or modern times. The learned author, Chu Li-t'ing, a man of extensive reading and scholarship, was employed in the cyclical year *ting-hai* (A. D. 1767) in the chancellerie of His Excellency Wu, Governor of the Province of Kiangsi, when he acquired a perfect knowledge of the processes of manufacture of porcelain at Ching-tê Chên, and wrote this 'Description of Porcelain' in six books, in which after researches into the ancient and comparison of the modern ware, he describes the different varieties in their order.

A hermit in the wilderness is unable to feast his eyes with the sight of the sacrificial vessels and ritual utensils of former sovereigns, but there is no one unacquainted with earthenware pans and clay vessels, such as are used every day for eating and drinking. This book will be widely distributed throughout the empire, and many will be delighted with the perusal of its contents. Does it not truly fill a gap left by the ancient writers? The learned author, having arranged and written out the manuscript, has handed it to me to be revised and given to the printer. Having finished my task, I write these few words by way of preface.

Written in the Chih-pu-tsu Chai by Tao T'ing-po[1], a student of Hsin-an, on the 1st day of the 3rd month of the cyclical year *chia-wu* (A. D. 1774) of the reign of Ch'ien-lung.

[1] The publisher of a voluminous Collection of Reprints called the *Chih-pu-tsu Chai Ts'ung Shu*. Cf. Wylie's *Chinese Literature*, pp. 214–17.

## FOURTH PREFACE

By Huang Hsi-fan.

The learned author Li-t'ing, of our own district, is an accomplished scholar of high acquirement, and his whole life has been devoted to writing and compiling books. Some have not been given to the printer, as the *Shuo wên lu yi*, *Yün hsüeh*, *Ch'in hsüeh*, *Ku wên ch'ing ying* and *T'ang po chia shih hsüan*; others have been published, the *Chin hua shih lu*, *Ming jên shih ch'ao*, *T'ang shih lü chieh*, *Tz'ŭ lin ho pi*, *Lü fu hsia k'o*, *Hsüeh shih chin to*, *Li-ting shih hsüan*, and chief of all, this *T'ao shuo*. Vessels made of pottery are necessarily in daily use, yet there are no special works on the subject by former authors, and only a few fragmentary notes to be gathered from the *Ko ku yao lun* and *Ch'ing pi tsang*. The learned author has carefully examined the modern processes of manufacture, and made wide researches into old works, so that there is not a single name nor a single vessel that he has omitted. Everything is arranged under four headings distributed in six books. Comparing this with the *Ko ku* and the other books, it stands in the proportion of a thousand basketsful of rice to one grain. I, Hsi-fan, was born too late to have the privilege of doing reverence to the author as my own teacher, but, as an intimate friend of his honourable son Ch'ing-ku'ei, I have been granted access to the learned author's studies and libraries, the Fan-t'ung-shan Fang, the Shu-hua Ch'uan, the P'o-lu-shan Fang, and the Yu-shih Chü, and, in the midst of his paint-brush holders and writing implements, I have seen the pictures and writings of the learned author all instinct with his genius. And now once more I offer him my tribute of admiration for his deep scholarship and wide learning, and also congratulate him on the possession of a son, Ch'ing-ku'ei, able to appreciate his father's work.

Written by Huang Hsi-fan, a student of the same place, in the Tsui-ching Lou, on the day after full moon of the 3rd month of the cyclical year *ting-wei* (A. D. 1787), in the reign of the Emperor Ch'ien-lung.

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5. *Chi chiu chang*, in four books, an ancient dictionary by Shih Yu, who lived in the reign of Yuan Ti of the Han Dynasty, 48–32 B. C.

6. *Chiang hsi ta chih.* Topographical description of the province of Kiangsi, compiled by Wang Tsung-mu early in the sixteenth century.

7. *Chiang hsi t'ung chih.* General Topography of the province of Kiangsi. Many editions have appeared. The one published by Hsieh Min, Governor of the province, in 1727, had 162 books. A revised edition has been issued during the present reign. It contains one book entitled *T'ao Chêng*, embodying the official regulations for the Imperial factories at Ching-tê Chên.

8. *Chieh ch'a chien.* A little book, by Fêng Ko-pin, on the preparation and use of the tea of the Chieh Hills, in Chekiang province.

9. *Ch'ih pei ou t'an.* In twenty-six books. A collection of miscellanies by Wang Shih-chên, a voluminous writer, published in 1691.

10. *Ching-tê-chên T'ao Lu.* Description of the porcelain made at Ching-tê Chên, in ten books, by Lan P'u, published in 1815. Partially translated by Stanislas Julien ('Histoire et Fabrication de la Porcelaine Chinoise.' Paris, 1856).

11. *Ch'ing pi tsang.* An account in two books of antiquities, pictures, old brocades, ancient bronzes, porcelain, seals, jewels, and other

objects of art and curiosity, by Chang Ying-wên, who died the day his book was finished. The Preface, dated 1595, is by his son Chang Ch'ien-tê, author of a book on flower vases (No. 66).

12. *Ch'ing yi lu.* A small miscellany by T'ao Ku, who lived in the tenth century.

13. *Chou Li* or *Chou Kuan.* Ritual of the Chou Dynasty (1122–249 B. C.). One of the Classics. French translation by Biot, 1851.

14. *Chou Shu.* History of the Chou Dynasty. A relic of the pre-Christian era, said to have been found with the Bamboo Annals in a tomb of one of the Wei princes. There are many lacunae in the text, eleven of the seventy-one original articles being lost.

15. *Ch'u Tz'ŭ.* Elegies of the ancient state of Ch'u. Principally the poetical production of Ch'ü Yuan, composed in the fourth century B. C.

16. *Chü yi lu.* In thirty-four books. A miscellaneous record by Wang Shih-chên (see No. 9) of the years 1689 to 1701.

17. *Chuang Tzŭ.* The work of the Taoist philosopher Chuang Chou. Fourth century B. C.

18. *Ch'un ch'u chêng yi.* The Spring and Autumn Annals with Commentaries. Translated by Dr. Legge (Chinese Classics, vol. v).

19. *Ch'un chu chi wên.* Essays by Ho Yuan of the Sung Dynasty.

20. *Ch'un ming mêng yü lu.* A description of Peking in seventy books by Sun Ch'êng-tsê, who lived here in the first half of the seventeenth century.

21. *Erh Ya.* An ancient dictionary of terms used in the Classics. A relic of the Chou Dynasty. Commentary by Kuo P'u of the third century A. D.

22. *Fa hua ching.* Translation into Chinese of the Lotus of the Law, Buddhist Sutras, made about 300 A. D. by a foreign priest.

23. *Fang yen.* A comparative vocabulary, in thirteen books, of synonyms used in different districts, ascribed to Yang Hsiung, 53 B. C.–A. D. 18.

24. *Fang yü shêng lan.* A geographical work by Chu Mu, published at the close of the Sung Dynasty in the middle of the thirteenth century.

25. *Fêng su t'ung.* A treatise, in six books, on popular customs, written by Ying Shao towards the end of the second century.

26. *Fou liang hsien chih.* Topographical description of the department in which the Imperial potteries are situated (cf. *Julien*, l. c., pp. lxvii–lxix).

27. *Fu hsüan tsa lu.* Miscellany written by Chên Yu towards the close of the Sung Dynasty, containing jottings on inscriptions, on calligraphy, writing implements, &c.

28. *Han Fei Tzŭ* or *Han Tzŭ.* The works of Han Fei, a philosopher of the third century B. C.

29. *Han shih wai chuan.* Anecdotes illustrating the classical Book of Odes, by Han Ying, who lived in the second century B. C.

30. *Han Shu.* History of the Han Dynasty (206 B. C.–A. D. 24). In 120 books. Compiled by Pan Ku.

31. *Hou ching lu.* A critical work, in eight books, by Chao Ling-chih, written near the end of the eleventh century.

32. *Hsi ching tsa chi.* A record, in six books, of incidents at Ch'ang-an, the metropolis during the Han Dynasty. Attributed to Liu Ch'in, who lived about our era, but more probably by Wu Chun, of the sixth century A. D.

33. *Hsi yü chi.* The celebrated account of Western Countries by the Buddhist pilgrim Hsüan Chuang, of the seventh century A. D.

34. *Hsiang Chien.* A small book on natural perfumes by T'u Lung, a writer in the Ming Dynasty, of the sixteenth century.

35. *Hsiang tsu pi chi.* A miscellaneous record, in twelve books, written by Chang Hung, of events during the years 1703 to 1705.

36. *Hsüan-ho fêng shih Kao-li t'u ching.* An account, in forty books, of Korea (*Kao-li*) by Hsü Ching, who was sent there on a mission in 1125, and wrote this book on his return to China. The illustrations were already lost when the book was first printed in 1167.

37. *Hsüan-ho hua pu.* A description, in twenty books, of the pictures in the Imperial Collection during the Hsüan-ho period (1119–25) of the reign of Hui Tsung of the Sung Dynasty.

38. *Hsüan-ho Po ku t'u.* An illustrated collection, in thirty books, of ancient bronze sacrificial vessels, bells, mirrors, arms, &c., by Wang Fu, compiled in the beginning of the twelfth century.

39. *Huai Nan Tzŭ.* A Taoist work, in twenty-one books, by Liu An, Prince of Huai Nan, who died 122 B. C.

40. *Jung ch'a li shuo.* A miscellany, in twelve books, by Ch'êng Chê, of the early part of the reigning dynasty. Seventeenth century.

41. *Kao chai man lu.* A short work, in one book, by Tsêng Ts'ao, a writer of the Sung Dynasty.

42. *K'ao ku t'u.* An illustrated collection, in ten books, of ancient bronzes by Lü Ta-lin, completed in 1092. Similar, and usually published as a supplement to the *Po ku t'u* (No. 38).

43. *K'ao kung chi.* 'Record of Handicrafts', a relic of the Chou Dynasty, forming the last section of the Chou Ritual (No. 13), and also translated into French by Biot, 1851.

44. *K'ao p'an yü shih.* A general examination of the furniture of the study, with historical notes on the various objects. By T'u Lung, a Ming author of the sixteenth century. Wrote also the *Mo chien* on Ink, and the *Hsiang chien* (No. 34) on Perfumes.

45. *Ko ku yao lun.* A description, in thirteen books, of objects

of art and antiquities, by Ts'ao Chao, published in the reign of Hung-wu, the founder of the Ming Dynasty, in 1387. A revised and much enlarged edition was prepared by Wang Tso in 1459. The thirteen Sections include:—1. Ancient Lyres. 2. Old Manuscripts. 3. Inscriptions from ancient stone tablets. 4. Extracts from writers on antiquities. 5. Old Pictures. 6. Precious Stones and Jewels; Antique Bronzes. 7. Ancient Ink-pallets; Curious Stones; Old Porcelain. 8. Lacquered and Inlaid Ware; Old Brocades and Stuffs; Curious Woods. 9. Description of objects for the Study. 10. Prefaces and Essays of old writers. 11. Jade Seals; Iron Tablets of authority. 12. Miscellanies; Gold and Silver badges of rank, &c. 13. Illustrations of agriculture and weaving; Researches into the old palaces of the Sung and Yuan Dynasties.

46. *Ku yü t'u.* Illustrated collection of ancient Jade, in 100 books, compiled by a commission of scholars under Lung Ta-yuan, appointed by the Emperor Hsiao Tsung of the Southern Sung Dynasty. Published in the year 1176.

47. *Kuang ya.* In ten books, an ancient dictionary by Chang Yi, who enlarged the *Erh ya* by adding extracts from writers of the Han Dynasty. Early in the second century A. D.

48. *Kuang yün.* A dictionary, in five books, of uncertain date, generally referred to the T'ang Dynasty, although the first edition is of the Sung period.

49. *K'ung Ts'ung Tzŭ.* The work of a scholar of that name, a descendant in the eighth generation of Confucius, and chiefly a record of the sayings and doings of the sage; but thought by some to be a product of a later period.

50. *Li Chi.* 'Book of Rites.' One of the five classics.

51. *Li tai chung ting yi ch'i kuan chih.* Description of inscriptions upon bells, caldrons, sacrificial vessels, and other bronzes, of the ancient dynasties, in twenty books, by Hsüeh Shang-kung. Twelfth century.

52. *Lieh Tzŭ.* Writings of Lieh Yü-k'ou, a Taoist philosopher of the fourth century B. C.

53. *Liu ch'ing jih cha.* Miscellaneous essays, in thirty-nine books, by T'ien Yi-hêng, a writer of the Ming Dynasty.

54. *Liu yen chai Pi chi.* Miscellaneous notes, in twelve books, by Li Jih-hua of the Ming Dynasty.

55. *Lo yang chia lan chi.* A descriptive account, in five books, of the Buddhist monasteries at Lo-yang, the metropolis of the Northern Wei Dynasty (A. D. 386–532), by Yang Hsien-chih, an officer of that dynasty. Fifth century.

56. *Lu Shih.* A history of ancient times, in forty-seven books, by Lo Pi of the Sung Dynasty, a work of secondary authority.

57. *Lü Shih Ch'un ch'iu.* A collection, in twenty-six books, of

historical notices upon early history, by Lü Pu-wei, the father of the Emperor Shih Huang Ti, who died 237 B.C. Commentary by Kao Yu, written about 205 A.D.

58. *Lung hêng.* Critical disquisition by Wang Ch'ung (A.D. 19–90), one of the most philosophical writers of the Han Dynasty.

59. *Nan Shih.* 'Southern History,' in eighty books, by Li Yen-shou. Comprising the annals of the First Sung, Northern Ch'i, Chou, and Sui Dynasties (A.D. 420–589).

60. *Nan ts'un sui pi.* Miscellaneous notes, in six books, by Lu T'ing-ts'an of the reigning dynasty, author of a supplement to the *Ch'a ching*, published in 1735.

61. *Ni ku lu.* A description, in four books, of manuscripts, pictures, antiquities, and objects of art and curiosity, by Ch'ên Chi-ju of the Ming Dynasty. Sixteenth century.

62. *P'ai shih hui pien.* A miscellany, in 175 books, by Wang Ch'i, a voluminous writer of the sixteenth century, author of the cyclopaedia *San ts'ai t'u hui*, &c.

63. *Pi Chi.* Memoranda by the above Ch'ên Chi-ju (No. 61). A book with the same title was written by Sung Ch'i (A.D. 998–1061) of the Sung Dynasty.

64. *Pi Ching.* An early book on the pencil-brush by Wang Hsi-chih, the famous calligrapher, who lived A.D. 321–379.

65. *Pi hêng* or *T'an-chai Pi hêng.* Essays by Hsing Ch'ieh of the Sung Dynasty. Thirteenth century.

66. *P'ing hua p'u.* A little work, in one book, on vases and flowers, and methods of arranging them, by Chang Ch'ien-tê of the Ming Dynasty (see No. 11).

67. *P'ing Shih.* 'History of Vases,' by Yuan Hung-tao, a famous scholar of the Ming Dynasty, who died in 1624.

68. *P'u-shu t'ing chi.* 'Memoirs from the Pavilion for sunning books,' written during the seventeenth century.

69. *Po ku t'u* (see No. 38).

70. *Po wu yao lan.* A valuable work, in sixteen books, by Ku Ying-t'ai, published in the Ming Dynasty, in the reign of T'ien-ch'i (1621–7). Includes:—1. Stone tablet inscriptions. 2. Books 3. Pictures. 4. Ancient bronzes. 5. Pottery and Porcelain. 6. Ink-pallets. 7. Gold. 8. Silver. 9. Pearls. 10. Precious Stones. 11. Jade. 12. Agates and Coral. 13. Amber and Glass. 14. Rock-crystal, Tortoiseshell, Ivory, &c. 15. Incense. 16. Lacquer and Curious Stones.

71. *San Ch'u hsin lu.* A narrative, by Chou Yü-ch'ung of the Sung Dynasty, of the lives of three chieftains, who set themselves up in succession as princes of Ch'u during the tenth century.

72. *San li t'u.* 'Illustrations of the Three Rituals'—the *Chou Li* the *Yi Li*, and the *Li Chi*—in twenty books, by Nieh Tsung-yi, who

lived in the tenth century. Other more recent books have been published under the same title.

73. *Shan t'ang k'ao so.* A critical work by Chang Tsun-ch'ing, a writer of the Sung Dynasty.

74. *Shih Chi.* 'Historical Records,' in 130 books, the first of the regular Dynastic Histories, compiled by Ssŭ-ma Ch'ien (163–85 B. C.).

75. *Shih Ching.* The Classic Book of Odes. Translated by Dr. Legge (Chinese Classics, vol. iv).

76. *Shih pên.* Ancient historical records, extending from the fabulous Emperor Huang Ti down to Nan Wang, the last of the Chou Dynasty. Quoted in the *Shih Chi.* Second century B. C.

77. *Shih Tzŭ.* Writings of Shih Chiao, a philosopher of the beginning of the third century B. C.

78. *Shih wu kan chu.* A general miscellany of affairs and things, in forty-one books, by Huang Yi-chêng, a writer of the Ming Dynasty, published in 1591.

79. *Shuo Wên.* The famous ancient dictionary compiled by Hsü Shên, at the close of the first century A. D. Presented to the Emperor An Ti in the year 121.

80. *Su shu k'an wu.* A dictionary, in twelve books, by Chiao Hung, published towards the end of the Ming Dynasty.

81. *Sui Shu.* The history, in eighty-five books, of the Sui Dynasty (A. D. 581–617), compiled by Wei Chêng and others.

82. *T'ai p'ing Huan yü chi.* A general description of China, in 193 books, by Lo Shih, published during the T'ai-p'ing period (A. D. 976–83). It gives the natural productions of each prefecture.

83. *T'ai p'ing yü lan.* The large cyclopaedia, in 1000 books, by Li Fang and others, published in the year 983.

84. *T'an yuan.* Memoranda by Yang Yi, a miscellany published in the beginning of the eleventh century.

85. *T'ang kuo shih p'u.* A record, in three books, by Li Chao of the T'ang Dynasty, of the period from K'ai-yuan to Chang-ch'ing (A. D. 713–821).

86. *T'ang liu tien.* 'The Six Canons of the T'ang Dynasty,' drawn up, in thirty books, by the Emperor Yuan Tsung, early in the eighth century.

87. *T'ang Shu.* The history, in 260 books, of the T'ang Dynasty (A. D. 618–906).

88. *Tu yang tsa pien.* An account by Su O, written about the end of the ninth century, of rare and curious objects brought to China from foreign countries during the period from 763 to 872.

89. *T'ung chien shih wên.* An exegetical work upon Ssŭ-ma Kuang's *T'ung chien,* written by Hu San-shêng in the Yuan Dynasty.

90. *T'ung chih.* A historical account of China, in 200 books, from the earliest times down to the T'ang Dynasty, by Ch'êng Chiao.

A supplement, in 527 books, was compiled by Imperial order in 1769.

91. *T'ung su wên.* A dictionary written by Fu Ch'ien of the After Han Dynasty (A. D. 25–220).

92. *T'ung ya.* A miscellany, in fifty-two books, by Fang Mi-chih, who lived in the reign of the last Emperor of the Ming Dynasty (1625–43).

93. *Tso Chuan.* Tso's Commentary on the Spring and Autumn Annals. Close of fifth century B. C. (Legge's Chinese Classics, vol. v).

94. *Wei Chih*, in thirty books, by Ch'ên Shou. Part of the History of the Three Kingdoms, *San kuo chih*, being that of the Wei Dynasty (A. D. 220–64).

95. *Wu ch'uan lu.* A journal, by Fan Ch'êng-ta, of a five-months' journey from Ssŭ-ch'uan to Hang-chou in the year 1177.

96. *Wu tsa tsu.* Collection of Memoranda by an author of the Ming Dynasty.

97. *Wu Yuan.* 'On the origin of things,' by Lo Ch'i, a writer of the Ming Dynasty.

98. *Yen fan lu.* A critical work, in sixteen books, by Ch'êng Ta-ch'ang of the Sung Dynasty, published in the year 1175.

99. *Yen pei tsa chih.* Miscellaneous essays, in two books, by Lung Yu of the Yuan Dynasty. The preface is dated 1333.

100. *Yen Tzŭ Ch'un ch'iu.* Biography of Yen Ying, a reputed disciple of Mo Tzŭ, the opponent of Mencius, by an unknown author, who lived probably some centuries before the Christian era.

101. *Yi Ching.* 'The Book of Changes,' an ancient book on divination. One of the Five Classics. Translated by Dr. Legge.

102. *Yi Li.* 'Decorum Ritual.' One of the three ancient ritual classics.

103. *Yo fu tsa lu.* A small work on music, written towards the close of the tenth century, by Tuan An-chieh.

104. *Yü chang ta shih chi.* Record of important affairs of the province of Kiangsi, the old name of which was Yü-chang.

105. *Yü P'ien.* A dictionary, in thirty books, by Ku Yeh-wang, published in the year 523 A. D.

# APPENDIX

# LETTRE

DU

## PERE D'ENTRECOLLES, Missionnaire de la Compagnie de JESUS:

*Au Pere Orry de la mesme Compagnie, Procureur des Missions de la Chine & des Indes.*

A Jao tcheou ce 1. Sept. 1712.

MON REVEREND PERE,

*La paix de N. S.*

Le séjour que je fais de temps en temps à *Kim te tchim* pour les besoins spirituels de mes Néophytes, m'a donné lieu de m'instruire de la maniere dont s'y fait cete belle porcelaine qui est si estimée, & qu'on transporte dans toutes les parties du monde. Bien que ma curiosité ne m'eust jamais porté á une semblable recherche, j'ay crû cependant qu'une description un peu détaillée de tout ce qui concerne ces sortes d'ouvrages, seroit de quelque utilité en Europe.

Outre ce que j'en ay vû par moy-mesme, j'ay appris beaucoup de particularitez des Chrestiens, parmi lesquels il y en a plusieurs qui travaillent en porcelaine, & d'autres qui en font un grand commerce. Je me suis encore assuré de la verité des réponses qu'ils ont faites à mes questions, par la lecture des livres Chinois qui traitent de cette matiere; & par ce moyen-là je croy avoir acquis une connoissance assez exacte de toutes les parties de ce bel art, pour en parler avec quelque confiance.

Parmi ces livres j'ay eu entre les mains l'Histoire ou les Annales de *Feou leam*, & j'ay lû avec soin dans le quatriéme Tome l'article qui regarde la porcelaine. *Kim te tchim* qui dépend de *Feou leam*, n'en est éloigné que d'une bonne lieuë; & *Feou leam* est une ville de la dépendance de *Jao tcheou*. C'est un usage à la Chine que chaque ville imprime l'histoire de son district: cette histoire comprend la situation, l'étenduë, les limites, & la nature du payis, avec les endroits les plus remarquables, les mœurs de ses habitans, les personnes qui s'y sont distinguées par les armes & par les lettres, ou celles qui ont esté

d'une probité au-dessus du commun. Les femmes mesme y ont leur place ; celles, par exemple, qui par attachement pour leur mari défunt ont gardé la viduité. Souvent on achete l'honneur d'estre cité dans ces Annales. C'est pourquoy le Mandarin avec ceux dont il prend conseil, les revoit tous les quarante ans ou environ, & alors il en retranche où il y ajoûte ce qu'il juge à propos.

On rapporte encore dans cette Histoire les évenemens extraordinaires, les prodiges qui arrivent, les monstres qui naissent en certains temps : ce qui arriva, par exemple, il n'y a que deux ans à *Fou tcheou*, où une femme accoucha d'un serpent qui la tétoit ; de mesme ce qui se vit à *Kim te tchim*, où une truye mit bas un petit elephant avec sa trompe bien formée, quoiqu'il n'y ait point d'élephans dans le pays ; ces faits seront probablement rapportez dans les Annales de ces deux villes. Peut-estre mesme mettra-t-on dans celles de *Feou leam* qu'une de nos Chrestiennes y accoucha d'un fils au seiziéme mois de sa grossesse.

Sur-tout on marque dans ces histoires les marchandises & les autres denrées qui sortent du payis ou qui s'y débitent. Si la Chine en general, ou si la ville de *Feou leam* en particulier n'avoit pas esté sujette à tant de révolutions differentes, j'aurois trouvé sans doute ce que je cherchois dans son histoire sur l'origine de la porcelaine : quoyqu'à dire vray c'est pour des Chinois que se font ces Rècueils, & non pas pour les Europeans ; & les Chinois ne s'embarassent gueres de ces sortes de connoissances.

Les Annales de *Feou leam* rapportent que depuis la seconde année du regne de l'Empereur *Tam ou te* de la Dynastie des *Tam*, c'est à dire selon nous depuis l'an 442. de Jesus-Christ, les ouvriers en porcelaine en ont toûjours fourni aux Empereurs ; qu'un ou deux Mandarins envoyez de la Cour presidoient à ce travail : on décrit ensuite fort au long la multitude & la varieté des logemens destinez dez ces premiers temps aux ouvriers qui travailloient à la porcelaine imperiale : c'est tout ce que j'ay trouvé sur l'antiquité de son origine. Il est pourtant vraysemblable qu'avant l'année 442. la porcelaine avoit déja cours, & que peu à peu elle a esté portée à un point de perfection capable de déterminer les plus riches Européans à s'en servir. On ne dit point qui en a esté l'inventeur, ny à quelle tentative ou à quel hazard on est redevable de cette invention. Anciennement, disent les Annales, la porcelaine estoit d'un blanc exquis, & n'avoit nul défaut : les ouvrages qu'on en faisoit, & qui se transportoient dans les autres Royaumes, ne s'y appelloient pas autrement que les bijoux précieux de *Jao tcheou*. Et plus bas on ajouste : la belle porcelaine qui est d'un blanc vif & éclatant, & d'un beau bleu céleste, sort toute de *Kim te tchim*. Il s'en fait dans d'autres endroits, mais elle est bien differente soit pour la couleur, soit pour la finesse.

En effet sans parler des ouvages de poterie qu'on fait par toute la Chine, & ausquels on ne donne jamais le nom de porcelaine, il y a quelques Provinces, comme celles de *Fou-Kien* & de *Canton* où l'on travaille en porcelaine: mais les étrangers ne peuvent s'y méprendre: celle de *Fou-Kien* est d'un blanc de neige qui n'a nul éclat, & qui n'est point mélangé de couleurs. Des Ouvriers de *Kim te tchim* y porterent autrefois tous leurs materiaux, dans l'esperance d'y faire un gain considerable, à cause du grand commerce que les Europeans font à *Emouy*; mais ce fut inutilement, ils ne purent jamais y réüssir. L'Empereur regnant, qui ne veut rien ignorer, a fait conduire à Pekin des Ouvriers en porcelaine, & tout ce qui s'employe pour ce travail; ils n'oublierent rien pour réüssir sous ses yeux: cependant on assure que leur ouvrage manqua. Il se peut faire que des raisons d'interest ou de politique eurent part à ce peu de succez: quoyqu'il en soit, c'est uniquement *Kim te tchim* qui a l'honneur de donner de la porcelaine à toutes les parties du monde. Le Japon mesme en vient acheter à la Chine.

Je ne puis me dispenser aprés cela, mon R. P. de vous faire icy la description de *Kim te tchim.* Il ne luy manque qu'une enceinte de murailles pour avoir le nom de Ville, & pour estre comparé aux Villes mesmes de la Chine les plus vastes & les plus peuplées. Ces endroits nommez *tchim* qui sont en petit nombre, mais qui sont d'un grand abord & d'un grand commerce, n'ont point coustume d'avoir d'enceinte, peut-estre afin qu'on puisse les étendre & les agrandir autant que l'on veut; peut-estre aussi afin qu'il y ait plus de facilité à embarquer & débarquer les marchandises.

On compte à *Kim te tchim* dix-huit mille familles. Il y a de gros Marchands dont le logement occupe un vaste espace, & contient une multitude prodigieuse d'ouvriers; aussi l'on dit communément qu'il y a plus d'un million d'ames, qu'il s'y consomme chaque jour plus de dix mille charges de ris, & plus de mille cochons. Au reste *Kim te tchim* a une grande lieuë de longueur sur le bord d'une belle riviere. Ce n'est point un tas de maisons, comme on pourroit se l'imaginer: les ruës sont tirées au cordeau, elles se coupent & se croisent à certaines distances, tout le terrain y est occupé, les maisons n'y sont mesme que trop serrées & les ruës trop étroites: en les traversant on croit estre au milieu d'une foire: on entend de tous costez les cris des Portefaix qui se font faire passage. On y voit un grand nombre de Temples d'Idoles qui ont esté bastis à beaucoup de frais. Un riche Marchand, aprés avoir traversé de vastes mers pour son commerce, a cru avoir échapé d'un naufrage par la protection de la Reine du Ciel, laquelle, à ce qu'il dit, luy apparut au fort de la tempeste. Pour accomplir le vœu qu'il fit alors, il vient de mettre tout son bien à luy construire un Palais, qui l'emporte pour la magnificence sur tous les autres

Temples. Dieu veuille que ce que j'en ay dit à mes Chrestiens se verifie un jour, & que ce Temple devienne effectivement une Basilique dediée à la veritable Reine du Ciel. Ce nouveau Temple a esté basti des piastres amassez dans les Indes; car cette monnoye Européane est icy fort connuë, & pour l'employer dans le commerce, il n'est pas necessaire de la fondre comme on fait ailleurs.

La dépense est bien plus considerable à *Kim te tchim* qu'à *Jao tcheou*, parce qu'il faut faire venir d'ailleurs tout ce qui s'y consomme, & mesme jusqu'au bois necessaire pour entretenir le feu des fourneaux. Cependant nonobstant la cherté des vivres, *Kim te tchim* est l'asile d'une infinité de pauvres familles qui n'ont point dequoy subsister dans les Villes des environs: on y trouve à employer les jeunes gens & les personnes les moins robustes. Il n'y a pas mesme jusqu'aux aveugles & aux estropiez qui y gagnent leur vie à broyer les couleurs. Anciennement, dit l'Histoire de *Feou leam*, on ne comptoit que 300. fourneaux à porcelaine dans *Kim te tchim*, presentement il y en a bien trois mille. Il n'est pas surprenant qu'on y voye souvent des incendies: c'est pour cela que le Genie du feu y a plusieurs Temples. Le Mandarin d'aujourd'huy en a élevé un qu'il luy a dedié, & ce fut en ma consideration qu'il exempta les Chrestiens de certaines corvées, ausquelles on oblige le menu peuple, quand on bastit ces sortes d'édifices. Le culte & les honneurs qu'on rend à ce Genie ne rendent pas les embrasemens plus rares: il y a peu de temps qu'il y eut huit cens maisons de bruslées: elles ont dû estre bien-tost rétablies, à en juger par la multitude des Charpentiers & des Maçons qui travailloient dans ce quartier. Le profit qui se tire du loüage des boutiques, rend ces peuples extrémement actifs à réparer ces sortes de pertes.

*Kim te tchim* est placé dans une plaine environnée de hautes montagnes: celle qui est à l'Orient & contre laquelle il est adossé, forme en dehors une espece de demi cercle; les montagnes qui sont à costé donnent issuë à deux rivieres qui se reünissent: l'une est assez petite, mais l'autre est fort grande, & forme un beau Port de prés d'une lieuë dans un vaste bassin, où elle perd beaucoup de sa rapidité. On voit quelquefois dans ce vaste espace jusqu'à deux ou trois rangs de barques à la queuë les unes des autres. Tel est le spectacle qui se presente à la vûë, lorsqu'on entre par une des gorges dans le Port: des tourbillons de flamme & de fumée qui s'élevent en differens endroits, font d'abord remarquer l'étenduë, la profondeur, & les contours de *Kim te tchim*: à l'entrée de la nuit on croit voir une vaste Ville toute en feu, ou bien une grande fournaise qui a plusieurs soupiraux. Peut-estre cette enceinte de montagnes forme-t-elle une situation propre aux ouvrages de porcelaine.

On sera étonné qu'un lieu si peuplé où il y a tant de richesses, où une infinité de barques abondent tous les jours, & qui n'est

point fermé de murailles, soit cependant gouverné par un seul Mandarin, sans qu'il y arrive le moindre desordre. A la verité *Kim te tchim* n'est qu'à une lieuë de *Feou leam*, & à 18. lieuës de *Jao tcheou* : mais il faut avoüer que la police y est admirable : chaque ruë a un Chef establi par le Mandarin ; & si elle est un peu longue, elle en a plusieurs : chaque Chef a dix Subalternes qui répondent chacun de dix maisons. Ils doivent veiller au bon ordre, accourir au premier tumulte, l'appaiser, en donner avis au Mandarin sous peine de la bastonnade, qui se donne icy fort liberalement. Souvent mesme le Chef du quartier a beau avertir du trouble qui vient d'arriver, & assurer qu'il a mis tout en œuvre pour le calmer, on est toûjours disposé à juger qu'il y a de sa faute, & il est difficile qu'il échape au chastiment. Chaque ruë a ses barricades qui se ferment durant la nuit : les grandes ruës en ont plusieurs. Un homme du quartier veille à chaque barricade, & il n'oseroit ouvrir la porte de sa barriere qu'à certains signaux. Outre cela la ronde se fait souvent par le Mandarin du lieu, & de temps en temps par des Mandarins de *Feou leam*. De plus il n'est gueres permis aux étrangers de coucher à *Kim te tchim* : il faut ou qu'ils passent la nuit dans leurs barques, ou qu'ils logent chez des gens de leur connoissance qui répondent de leur conduite. Cette police maintient tout dans l'ordre, & establit une sureté entiere dans un lieu, dont les richesses réveilleroient la cupidité d'une infinité de voleurs.

Aprés ce petit détail sur la situation & sur l'état present de *Kim te tchim*, venons à la porcelaine qui en fait toute la richesse. Ce que j'ay à vous en dire, mon R. P. se réduit à ce qui entre dans sa composition, & aux préparatifs qu'on y apporte : aux differentes especes de porcelaines, & à la maniere de les former : à l'huile qui luy donne de l'éclat, & à ses qualitez : aux couleurs qui en font l'ornement, & à l'art de les appliquer : à la cuisson, & aux mesures qu'on prend pour luy donner le degré de chaleur qui convient. Enfin je finiray par quelques reflexions sur la porcelaine ancienne, sur la moderne, & sur certaines choses qui rendent impratiquables aux Chinois des ouvrages dont on a envoyé, & dont on pourroit envoyer des desseins. Ces ouvrages où il est impossible de réüssir à la Chine, se feroient peut-estre facilement en Europe, si l'on y trouvoit les mesmes materiaux.

Avant que de commencer, ne seroit-il pas à propos de détromper ceux qui croiroient peut-estre que le nom de Porcelaine vient du mot Chinois ? A la verité il y a des mots, quoyqu'en petit nombre, qui sont François & Chinois tout ensemble. Ce que nous appellons Thé, par exemple, a pareillement le nom de Thé dans la Province de *Fo Kien*, quoyqu'il s'appelle *tcha* dans la langue Mandarine. *Papa* & *Mama* sont aussi des noms qui en certaines Provinces de la Chine, & à *Kim te tchim* en

particulier, sont dans la bouche des enfans pour signifier pere, mere, & grand-mere. Mais pour ce qui est du nom de porcelaine, c'est si peu un mot Chinois, qu'aucune des syllabes qui le compose, ne peut ny estre prononcé ny estre écrit par des Chinois, ces sons ne se trouvant point dans leur langue. Il y a apparence que c'est des Portugais qu'on a pris ce nom ; quoyque parmi eux *porcellana* signifie proprement une tasse ou une écuelle, & que *loça* soit le nom qu'ils donnent generalement à tous les ouvrages que nous nommons *porcelaine*. L'usage est le maistre des langues, c'est à chaque Nation à nous apprendre l'idée qu'elle attache à ses mots. La porcelaine s'appelle communément à la Chine *tseki*.

La matiere de la porcelaine se compose de deux sortes de terres, l'une appellée *pe tun tse*, & l'autre qu'on nomme *kao lin*. Celle-cy est parsemée de corpuscules qui ont quelque éclat : l'autre est simplement blanche & trés-fine au toucher. En mesme temps qu'un grand nombre de grosses barques remontent la riviere de *Jao tcheou* à *Kim te tchim* pour se charger de porcelaines, il y en descend de *Ki muen* presque autant de petites, qui sont chargées de *pe tun tse* & de *kao lin* réduits en forme de briques : car *Kim te tchim* ne produit aucun des materiaux propres à la porcelaine. Les *pe tun tse* dont le grain est si fin, ne sont autre chose que des quartiers de rochers qu'on tire des carrieres, & ausquels on donne cette forme. Toute pierre n'y est pas propre, sans quoy il seroit inutile d'en aller chercher à vingt ou trente lieuës dans la Province voisine. La bonne pierre, disent les Chinois, doit tirer un peu sur le verd.

Voicy quelle est la premiere préparation. On se sert d'une massuë de fer pour briser ces quartiers de pierre, aprés quoy on met les morceaux brisez dans des mortiers, & par le moyen de certains leviers qui ont une teste de pierre armée de fer, on acheve de les réduire en une poudre trés-fine. Ces leviers joüent sans cesse ou par le travail des hommes, ou par le moyen de l'eau ; de la mesme maniere que font les martinets dans les moulins à papier. On prend ensuite cette poussiere, on la jette dans une grande urne remplie d'eau, & on la remuë fortement avec une pesle de fer. Quand on l'a laissé reposer quelques momens, il surnage une espece de cresme épaisse de quatre à cinq doigts : on la leve & on la verse dans un autre vase plein d'eau. On agite ainsi plusieurs fois l'eau de la premiere urne, recueillant à chaque fois le nuage qui s'est formé, jusqu'à ce qu'il ne reste plus que le gros marc, que son poids précipite d'abord : on le tire, & on le pile de nouveau.

Au regard de la seconde urne où a esté jetté ce qui a esté recueilli de la premiere, on attend qu'il se soit formé au fond une espece de paste : lorsque l'eau paroist au dessus fort claire, on la verse par inclination pour ne pas troubler le sediment, & l'on jette cette paste dans de grands moules propres à la secher.

Avant qu'elle soit tout-à-fait durcie, on la partage en petits carreaux qui s'achetent par centaines. Cette figure & sa couleur luy ont fait donner le nom de *pe tun tse.*

Les moules où se jette cette paste, sont des especes de quaisses fort grandes & fort larges. Le fond est rempli de briques placées selon leur hauteur, de telle sorte que la superficie soit égale. Sur ce lit de briques ainsi rangées on étend une grosse toile qui remplit la capacité de la quaisse : alors on y verse la matiere, qu'on couvre peu aprés d'une autre toile, sur laquelle on met un lit de briques couchées de plat les unes auprés des autres : tout cela sert à exprimer l'eau plus promptement, sans que rien se perde de la matiere de la porcelaine, qui en se durcissant reçoit aisément la figure des briques. Il n'y auroit rien à ajouster à ce travail, si les Chinois n'estoient pas accoustumez à alterer leurs marchandises : mais des gens qui roulent de petits grains de paste dans la poussiere de poivre pour les en couvrir, & les mesler avec du poivre veritable, n'ont garde de vendre des *pe tun tse* sans y mesler du marc : c'est pourquoy on est obligé de les purifier encore à *Kim te tchim* avant que de les mettre en œuvre.

Le *kao lin* qui entre dans la composition de la porcelaine, demande un peu moins de travail que les *pe tun tse* : la nature y a plus de part. On en trouve des mines dans le sein de certaines montagnes, qui sont couvertes au dehors d'une terre rougeastre. Ces mines sont assez profondes ; on y trouve par grumeaux la matiere en question, dont on fait des quartiers en forme de carreaux, en observant la mesme methode que j'ay marquée par rapport aux *pe tun tse.* Je ne ferois pas difficulté de croire que la terre blanche de Malthe, qu'on appelle la terre de saint Paul, auroit dans sa matrice beaucoup de rapport avec le *kao lin* dont je parle, quoyqu'on n'y remarque pas les petites parties argentées, dont est semé le *kao lin.*

C'est du *kao lin* que la porcelaine fine tire toute sa fermeté : il en est comme les nerfs. Ainsi c'est le meslange d'une terre molle qui donne de la force aux *pe tun tse,* lesquels se tirent des plus durs rochers. Un riche Marchand m'a conté que des Anglois ou des Hollandois (car le nom Chinois est commun aux deux Nations) firent acheter il y a quelques années des *pe tun tse,* qu'ils emporterent dans leur payis, pour y faire de la porcelaine ; mais que n'ayant point pris de *kao lin,* leur entreprise échoüa, comme ils l'ont avoüé depuis. Sur quoy le Marchand Chinois me disoit en riant : ils vouloient avoir un corps dont les chairs se soutinssent sans ossemens.

Outre les barques chargées de *pe tun tse* & de *kao lin* dont le rivage de *Kim te tchim* est bordé, on en trouve d'autres remplies d'une substance blancheastre & liquide. Je sçavois depuis longtemps que cette substance estoit l'huile qui donne à la porcelaine sa blancheur & son éclat ; mais j'en ignorois la

composition que j'ay enfin apprise. Il me semble que le nom Chinois *yeou*, qui se donne aux differentes sortes d'huile, convient moins à la liqueur dont je parle, que celuy de *tsi*, qui signifie vernis, & je crois que c'est ainsi qu'on l'appelleroit en Europe. Cette huile ou ce vernis se tire de la pierre la plus dure, ce qui n'est pas surprenant, puisqu'on prétend que les pierres se forment principalement des sels & des huiles de la terre, qui se meslent & qui s'unissent étroitement ensemble.

Quoyque l'espece de pierre dont se font les *pe tun tse*, puisse estre employée indifferemment pour en tirer de l'huile, on fait choix pourtant de celle qui est la plus blanche, & dont les taches sont les plus vertes. L'Histoire de *Feou leam*, bien qu'elle ne descende pas dans le détail, dit que la bonne pierre pour l'huile est celle qui a des taches semblables à la couleur de la feüille de cyprés, *pe chu ye pan*, ou qui a des marques rousses sur un fond un peu brun, à peu prés comme la linaire *ju tchi ma tam*. Il faut d'abord bien laver cette pierre, aprés quoy on y apporte les mesmes préparations que pour les *pe tun tse* : quand on a dans la seconde urne ce qui a esté tiré de plus pur de la premiere, aprés toutes les façons ordinaires, sur cent livres ou environ de cette cresme, on jette une livre de pierre ou d'un mineral semblable à l'alun, nommé *che kao* : il faut le faire rougir au feu, & ensuite le piler : c'est comme la presure qui luy donne de la consistence, quoyqu'on ait soin de l'entretenir toûjours liquide.

Cette huile de pierre ne s'employe jamais seule, on y en mesle une autre qui en est comme l'ame. En voicy la composition : on prend de gros quartiers de chaux vive, sur lesquels on jette avec la main un peu d'eau pour les dissoudre & les réduire en poudre. Ensuite on fait une couche de fougere seche, sur laquelle on met une autre couche de chaux amortie. On en met ainsi plusieurs alternativement les unes sur les autres, aprés quoy on met le feu à la fougere. Lorsque tout est consumé, l'on partage ces cendres sur de nouvelles couches de fougere seche : cela se fait au moins cinq ou six fois de suite, on peut le faire plus souvent, & l'huile en est meilleure. Autrefois, dit l'Histoire de *Feou leam*, outre la fougere on y employoit le bois d'un arbre dont le fruit s'appelle *se tse* : à en juger par l'âcreté du fruit quand il n'est pas meur, & par son petit couronnement, je croirois que c'est une espece de neffle : on ne s'en sert plus maintenant, à ce que m'ont dit mes Néophytes, apparemment parce qu'il est devenu fort rare en ce payis-cy. Peut-estre est-ce faute de ce bois que la porcelaine qui se fait maintenant, n'est pas si belle que celle des premiers temps. La nature de la chaux & de la fougere contribuë aussi à la bonté de l'huile, & j'ay remarqué que celle qui vient de certains endroits, est bien plus estimée que celle qui vient d'ailleurs.

Quand on a des cendres de chaux & de fougere jusqu'à une certaine quantite, on les jette dans une urne pleine d'eau. Sur

cent livres il faut y dissoudre une livre de *che kao*, bien agiter cette mixtion, ensuite la laisser reposer jusqu'à ce qu'il paroisse sur la surface un nuage ou une croûte qu'on ramasse & qu'on jette dans une seconde urne, & cela à plusieurs reprises. Quand il s'est formé une espece de paste au fond de la seconde urne, on en verse l'eau par inclination, on conserve ce fonds liquide, & c'est la seconde huile qui doit se mesler avec la précedente. Pour un juste meslange il faut que ces deux especes de purée soient également épaisses : afin d'en juger, on plonge à diverses reprises dans l'une & dans l'autre de petits carreaux de *pe tun tse*, en les retirant on voit sur leur superficie si l'épaisissement est égal de part & d'autre. Voilà ce qui regarde la qualité de ces deux sortes d'huile. Pour ce qui est de la quantité, le mieux qu'on puisse faire, c'est de mesler dix mesures d'huile de pierre, avec une mesure d'huile faite de cendre de chaux & de fougere : ceux qui l'épargnent, n'en mettent jamais moins de trois mesures. Les Marchands qui vendent cette huile, pour peu qu'ils ayent d'inclination à tromper, ne sont pas fort embarassez à en augmenter le volume : ils n'ont qu'à jetter de l'eau dans cette huile, & pour couvrir leur fraude, y ajouster du *che kao* à proportion, qui empesche la matiere d'estre trop liquide.

Avant que d'expliquer la maniere dont cette huile ou plustost ce vernis s'applique, il est à propos de décrire comment se forme la porcelaine. Je commence d'abord par le travail qui se fait dans les endroits les moins frequentez de *Kim te tchim*. Là dans une enceinte de murailles on bastit de vastes apentis, où l'on voit étage sur étage un grand nombre d'urnes de terre. C'est dans cette enceinte que demeurent & travaillent une infinité d'ouvriers qui ont chacun leur tasche marquée. Une piece de porcelaine, avant que d'en sortir pour estre portée au fourneau, passe par les mains de plus de vingt personnes, & cela sans confusion. On a sans doute éprouvé que l'ouvrage se fait ainsi beaucoup plus viste.

Le premier travail consiste à purifier de nouveau le *pe tun tse* & le *kao lin* du marc qui y reste quand on les vend. On brise les *pe tun tse*, & on les jette dans une urne pleine d'eau ; ensuite avec une large espatule on acheve en remuant de les dissoudre : on les laisse reposer quelques momens, aprés quoy on ramasse ce qui surnage, & ainsi du reste, de la maniere qui a esté expliquée cy-dessus.

Pour ce qui est des pieces de *kao lin*, il n'est pas necessaire de les briser : on les met tout simplement dans un panier fort clair, qu'on enfonce dans une urne remplie d'eau : le *kao lin* s'y fond aisément de luy-mesme. Il reste d'ordinaire un marc qu'il faut jetter. Au bout d'un an ces rebuts s'accumulent, & font de grands monceaux d'un sable blanc & spongieux dont il faut vuider le lieu où l'on travaille. Ces deux matieres de *pe tun tse*

& de *kao lin* ainsi préparées, il en faut faire un juste meslange : on met autant de *kao lin* que de *pe tun tse* pour les porcelaines fines : pour les moyennes, on employe quatre parts de *kao lin* sur six de *pe tun tse.* Le moins qu'on en mette, c'est une part de *kao lin* sur trois de *pe tun tse.*

Aprés ce premier travail on jette cette masse dans un grand creux bien pavé & cimenté de toutes parts : puis on la foule & on la pestrit jusqu'à ce qu'elle se durcisse ; ce travail est fort rude : ceux des Chrestiens qui y sont employez, ont de la peine à se rendre à l'Eglise : ils ne peuvent en obtenir la permission, qu'en substituant quelques autres en leur place, parce que dés que ce travail manque, tous les autres ouvriers sont arrestez.

De cette masse ainsi préparée on tire differens morceaux qu'on étend sur de larges ardoises. Là on les pestrit & on les roule en tous les sens, observant soigneusement qu'il ne s'y trouve aucun vuide, ou qu'il ne s'y mesle aucun corps étranger. Un cheveu, un grain de sable perdroit tout l'ouvrage. Faute de bien façonner cette masse, la porcelaine se fesle, éclatte, coule, & se dejette. C'est de ces premiers élemens que sortent tant de beaux ouvrages de porcelaine, dont les uns se font à la rouë, les autres se font uniquement sur des moules, & se perfectionnent ensuite avec le ciseau.

Tous les ouvrages unis se font de la premiere façon. Une tasse, par exemple, quand elle sort de dessus la rouë, n'est qu'une espece de calotte imparfaite, à peu prés comme le dessus d'un chapeau qui n'a pas encore esté appliqué sur la forme. L'ouvrier luy donne d'abord le diametre & la hauteur qu'on souhaitte, & elle sort de ses mains presque aussi-tost qu'il l'a commencée : car il n'a que trois deniers de gain par planche, & chaque planche est garnie de 26. pieces. Le pied de la tasse n'est alors qu'un morceau de terre de la grosseur du diametre qu'il doit avoir, & qui se creuse avec le ciseau, lorsque la tasse est seche, & qu'elle a de la consistence, c'est-à-dire, aprés qu'elle a reçû tous les ornemens qu'on veut luy donner. Effectivement cette tasse au sortir de la rouë est d'abord reçûë par un second ouvrier qui l'asseoit sur sa base. Peu aprés elle est livrée à un troisiéme qui l'applique sur son moule, & luy en imprime la figure. Ce moule est sur une espece de tour. Un quatriéme ouvrier polit cette tasse avec le ciseau, surtout vers les bords, & la rend déliée autant qu'il est necessaire pour luy donner de la transparence : il la racle à plusieurs reprises, la moüillant chaque fois tant soit peu si elle est trop seche, de peur qu'elle ne se brise. Quand on retire la tasse de dessus le moule, il faut la rouler doucement sur ce mesme moule sans la presser plus d'un costé que de l'autre, sans quoy il s'y fait des cavitez, ou bien elle se dejette. Il est surprenant de voir avec quelle vistesse ces vases passent par tant de differentes mains. On dit qu'une piece de porcelaine cuite a passé par les mains de soixante-dix

ouvriers. Je n'ay pas de peine à le croire aprés ce que j'en ay vû moy-mesme : car ces grands laboratoires ont esté souvent pour moy comme une espece d'Areopage, où j'ay annoncé celuy qui a formé le premier homme du limon, & des mains duquel nous sortons pour devenir des vases de gloire ou d'ignominie.

Les grandes pieces de porcelaine se font à deux fois : une moitié est élevée sur la rouë par trois ou quatre hommes qui la soutiennent chacun de son costé pour luy donner sa figure : l'autre moitié estant presque seche s'y applique : on l'y unit avec la matiere mesme de la porcelaine délayée dans l'eau, qui sert comme de mortier ou de colle. Quand ces pieces ainsi collées sont tout-à-fait seches, on polit avec le couteau en dedans & en dehors l'endroit de la réünion, qui par le moyen du vernis dont on le couvre, s'égale avec tout le reste. C'est ainsi qu'on applique aux vases des ances, des oreilles, & d'autres pieces rapportées. Cecy regarde principalement la porcelaine qu'on forme sur les moules ou entre les mains, telles que sont les pieces canelées, ou celles qui sont d'une figure bisarre, comme les animaux, les grotesques, les Idoles, les bustes que les Europeans ordonnent, & d'autres semblables. Ces sortes d'ouvrages moulez se font en trois ou quatre pieces qu'on ajouste les unes aux autres, & que l'on perfectionne ensuite avec des instrumens propres à creuser, à polir, & à rechercher differens traits qui échapent au moule. Pour ce qui est des fleurs & des autres ornemens qui ne sont point en relief, mais qui sont comme gravées, on les applique sur la porcelaine avec des cachets & des moules : on y applique aussi des reliefs tout préparez, de la mesme maniere à peu prés qu'on applique des galons d'or sur un habit.

Voicy ce que j'ay vû depuis peu touchant ces sortes de moules. Quand on a le modele de la piece de porcelaine qu'on desire, & qui ne peut s'imiter sur la rouë entre les mains du Potier, on applique sur ce modele de la terre propre pour les moules : cette terre s'y imprime, & le moule se fait de plusieurs pieces dont chacune est d'un assez gros volume : on le laisse durcir quand la figure y est imprimée. Lorsqu'on veut s'en servir, on l'approche du feu pendant quelque temps, aprés quoy on le remplit de la matiere de porcelaine à proportion de l'épaisseur qu'on veut luy donner : on presse avec la main dans tous les endroits, puis on presente un moment le moule au feu. Aussitost la figure empreinte se détache du moule par l'action du feu, qui consume un peu de l'humidité qui colloit cette matiere au moule. Les differentes pieces d'un tout tirées separément, se réünissent ensuite avec de la matiere de porcelaine un peu liquide. J'ay vû faire ainsi des figures d'animaux qui estoient toutes massives : on avoit laissé durcir cette masse, & on luy avoit donné ensuite la figure qu'on se proposoit, aprés quoy on la perfectionnoit avec le ciseau, où l'on y ajoustoit des parties

travaillées separément. Ces sortes d'ouvrages se font avec grand soin, tout y est recherché. Quand l'ouvrage est fini, on luy donne le vernis, & on le cuit : on le peint ensuite, si l'on veut, de diverses couleurs, & on y applique l'or, puis on le cuit une seconde fois. Des pieces de porcelaines ainsi travaillées se vendent extrémement cher. Tous ces ouvrages doivent estre mis à couvert du froid : leur humidité les fait éclater quand ils ne sechent pas également. C'est pour parer à cet inconvenient qu'on fait quelquefois du feu dans ces laboratoires.

Ces moules se font d'une terre jaune, grasse, & qui est comme en grumeaux : je la crois assez commune, on la tire d'un endroit qui n'est pas éloigné de *Kim te tchim*. Cette terre se paistrit, & quand elle est bien liée & un peu durcie, on en prend la quantité necessaire pour un moule, & on la bat fortement. Quand on luy a donné la figure qu'on souhaitte, on la laisse secher : aprés quoy on la façonne sur le tour. Ce travail se paye cherement. Pour expedier un ouvrage de commande, on fait un grand nombre de moules, afin que plusieurs troupes d'ouvriers travaillent à la fois. Quand on a soin de ces moules, ils durent trés long-temps. Un Marchand qui en a de tout prests pour les ouvrages de porcelaine qu'un European demande, peut donner sa marchandise bien plustost, à meilleur marché, & faire un gain plus considerable qu'un autre qui auroit à faire ces moules. S'il arrive que ces moules s'écorchent ou qu'il s'y fasse la moindre breche, ils ne sont plus en estat de servir, si ce n'est pour des porcelaines de la mesme figure, mais d'un plus petit volume. On les met alors sur le tour, & on les rabotte, afin qu'ils puissent servir une seconde fois.

Il est temps d'ennoblir la porcelaine en la faisant passer entre les mains des Peintres. Ces *Hoa pei* ou Peintres de porcelaine ne sont gueres moins gueux que les autres ouvriers : il n'y a pas dequoy s'en étonner, puisqu'à la réserve de quelques-uns d'eux, il ne pourroient passer en Europe que pour des apprentis de quelques mois. Toute la science de ces Peintres, & en general de tous les Peintres Chinois, n'est fondée sur aucun principe, & ne consiste que dans une certaine routine aidée d'un tour d'imagination assez bornée. Ils ignorent toutes les belles regles de cet art. Il faut avoüer pourtant qu'ils peignent des fleurs, des animaux, & des payisages qui se font admirer sur la porcelaine, aussi-bien que sur les éventails, & sur les lanternes d'une gase trés-fine.

Le travail de la peinture est partagé dans un mesme laboratoire entre un grand nombre d'ouvriers. L'un a soin uniquement de former le premier cercle coloré qu'on voit prés des bords de la porcelaine, l'autre trace des fleurs que peint un troisiéme : celuy-cy est pour les eaux & les montagnes, celuy-là pour les oyseaux & pour les autres animaux. Les figures humaines sont d'ordinaire les plus maltraitées ; certains payisages

& certains plans de ville enluminez qu'on apporte d'Europe à la Chine, ne nous permettent pas de railler les Chinois, sur la maniere dont ils se representent dans leurs peintures.

Pour ce qui est des couleurs de la porcelaine, il y en a de toutes les sortes. On n'en voit gueres en Europe que de celle qui est d'un bleu vif sur un fond blanc. Je crois pourtant que nos Marchands y en ont apporté d'autres. Il s'en trouve dont le fond est semblable à celuy de nos miroirs ardens: il y en a d'entierement rouges, & parmi celles-là, les unes sont d'un rouge à l'huile, *yeou li hum*; les autres sont d'un rouge soufflé, *tchoui hum*, & sont semées de petits points à peu prés comme nos mignatures. Quand ces deux sortes d'ouvrages réüssissent dans leur perfection, ce qui est assez difficile, ils sont infiniment estimez & extrémement chers.

Enfin il y a des porcelaines où les payisages qui y sont peints, se forment du meslange de presque toutes les couleurs relevées par l'éclat de la dorure. Elles sont fort belles, si l'on y fait de la dépense: autrement la porcelaine ordinaire de cette espece n'est pas comparable à celle qui est peinte avec le seul azur. Les Annales de *Kim te tchim* disent qu'anciennement le peuple ne se servoit que de porcelaine blanche: c'est apparemment parce qu'on n'avoit pas trouvé aux environs de *Jao tcheou* un azur moins précieux que celuy qu'on employe pour la belle porcelaine, lequel vient de loin & se vend assez cher.

On raconte qu'un Marchand de porcelaine ayant fait naufrage sur une coste deserte, y trouva beaucoup plus de richesses qu'il n'en avoit perdu. Comme il erroit sur la coste, tandis que l'équipage se faisoit un petit bastiment des debris du vaisseau, il apperçut que les pierres propres à faire le plus bel azur y estoient trés-communes: il en apporta avec luy une grosse charge; & jamais, dit-on, on ne vit à *Kim te tchim* de si bel azur. Ce fut vainement que le Marchand Chinois s'efforça dans la suite de retrouver cette coste, où le hasard l'avoit conduit.

Telle est la maniere dont l'azur se prépare: on l'ensevelit dans le gravier qui est à la hauteur d'un demi pied dans le fourneau: il s'y rôtit durant 24. heures, ensuite on le réduit en une poudre impalpable, ainsi que les autres couleurs, non sur le marbre, mais dans de grands mortiers de porcelaine, dont le fond est sans vernis, de mesme que la teste du pilon qui sert à broyer.

Le rouge se fait avec la couperose, *tsao fan*: peut-estre les Chinois ont-ils en cela quelque chose de particulier, c'est pourquoy je vais rapporter leur methode. On met une livre de couperose dans un creuset qu'on lutte bien avec un second creuset: au dessus de celuy-cy est une petite ouverture, qui se couvre de telle sorte qu'on puisse aisément la découvrir s'il en est besoin. On environne le tout de charbon à grand feu, & pour avoir un plus fort reverbere, on fait un circuit de

briques. Tandis que la fumée s'éleve fort noire, la matiere n'est pas encore en estat; mais elle l'est aussi-tost qu'il sort une espece de petit nuage fin & délié. Alors on prend un peu de cette matiere, on la délaye dans l'eau, & on en fait l'épreuve sur du sapin. S'il en sort un beau rouge, on retire le brasier qui environne & couvre en partie le creuset. Quand tout est refroidi, on trouve un petit pain de ce rouge qui s'est formé au bas du creuset. Le rouge le plus fin est attaché au creuset d'enhaut. Une livre de couperose donne quatre onces du rouge dont on peint la porcelaine.

Bien que la porcelaine soit blanche de sa nature, & que l'huile qu'on luy donne serve encore à augmenter sa blancheur; cependant il y a de certaines figures en faveur desquelles on applique un blanc particulier sur la porcelaine qui est peinte de differentes couleurs. Ce blanc se fait d'une poudre de caillou transparent, qui se calcine au fourneau de mesme que l'azur. Sur demie once de cette poudre, on met une once de ceruse pulverisée: c'est aussi ce qui entre dans le meslange des couleurs: par exemple pour faire le verd, à une once de ceruse & à une demie once de poudre de caillou, on ajouste trois onces de ce qu'on nomme *tom hoa pien.* Je croirois, sur les indices que j'en ay, que ce sont les scories les plus pures du cuivre qu'on a battu.

Le verd préparé devient la matrice du violet, qui se fait en y ajoustant une dose de blanc. On met plus de verd préparé à proportion qu'on veut le violet plus foncé. Le jaune se fait en prenant sept dragmes du blanc préparé comme je l'ay dit, ausquelles on ajouste trois dragmes du rouge de couperose. Toutes ces couleurs appliquées sur la porcelaine déja cuite aprés avoir esté huilée, ne paroissent vertes, violettes, jaunes, ou rouges, qu'aprés la seconde cuisson qu'on leur donne. Ces diverses couleurs s'appliquent, dit le Livre Chinois, avec la ceruse, le salpêtre, & la couperose. Les Chrestiens qui sont du mestier, ne m'ont parlé que de la ceruse, qui se mesle avec la couleur quand on la dissoud dans l'eau gommée.

Le rouge appliqué à l'huile se prépare en meslant le rouge *tom lou hum*, ou mesme le rouge dont je viens de parler, avec l'huile ordinaire de la porcelaine, & avec une autre huile faite de cailloux blancs préparée comme la premiere espece d'huile: on ne m'a pas sçu dire la quantité de l'une & de l'autre, ny combien on délayoit de rouge dans ce meslange d'huiles: divers essais peuvent découvrir le secret. On laisse ensuite secher la porcelaine, & on la cuit au fourneau ordinaire. Si aprés la cuisson le rouge sort pur & brillant, sans qu'il y paroisse la moindre tache, c'est alors qu'on a atteint la perfection de l'art. Ces porcelaines ne resonnent point lorsqu'on les frappe.

L'autre espece de rouge soufflé se fait ainsi: on a du rouge tout préparé, on prend un tuyau dont une des ouvertures est

couverte d'une gase fort serrée, on applique doucement le bas du tuyau sur la couleur dont la gase se charge, aprés quoy on souffle dans le tuyau contre la porcelaine, qui se trouve ensuite toute semée de petits points rouges. Cette sorte de porcelaine est encore plus chere & plus rare que la précedente, parce que l'execution en est plus difficile, si l'on y veut garder toutes les proportions requises.

La porcelaine noire a aussi son prix & sa beauté : on l'appelle *ou mien :* ce noir est plombé & semblable à celuy de nos miroirs ardens. L'or qu'on y met luy donne un nouvel agrément. On donne la couleur noire à la porcelaine lorsqu'elle est seche, & pour cela on mesle trois onces d'azur avec sept onces d'huile ordinaire de pierre. Les épreuves apprennent au juste quel doit estre ce meslange, selon la couleur plus ou moins foncée qu'on veut luy donner. Lorsque cette couleur est seche, on cuit la porcelaine ; aprés quoy on y applique l'or, & on la recuit de nouveau dans un fourneau particulier.

Il se fait icy une autre sorte de porcelaine que je n'avois pas encore vûë : elle est toute percée à jour en forme de découpure : au milieu est une coupe propre à contenir la liqueur. La coupe ne fait qu'un corps avec la découpure. J'ay vû d'autres porcelaines où des Dames Chinoises & Tartares estoient peintes au naturel. La draperie, le teint, & les traits du visage, tout y estoit recherché. De loin on eut pris ces ouvrages pour de l'émail.

Il est à remarquer que quand on ne donne point d'autre huile à la porcelaine, que celle qui se fait de cailloux blancs, cette porcelaine devient d'une espece particuliere, qu'on appelle icy *tsoui ki.* Elle est toute marbrée, & coupée en tous les sens d'une infinité de veines : de loin on la prendroit pour une porcelaine brisée, dont toutes les pieces demeurent dans leur place ; c'est comme un ouvrage à la Mosaïque. La couleur que donne cette huile, est d'un blanc un peu cendré. Si la porcelaine est toute azurée, & qu'on luy donne cette huile, elle paroistra également coupée & marbrée, lorsque la couleur sera seche.

Quand on veut appliquer l'or, on le broye, & on le dissoud au fond d'une porcelaine, jusqu'à ce qu'on voye au dessous de l'eau un petit ciel d'or. On le laisse secher, & lorsqu'on doit l'employer, on le dissoud par partie dans une quantité suffisante d'eau gommée : avec trente parties d'or on incorpore trois parties de ceruse, & on l'applique sur la porcelaine de mesme que les couleurs.

Enfin il y a une espece de porcelaine qui se fait de la maniere suivante : on luy donne le vernis ordinaire, on la fait cuire, ensuite on la peint de diverses couleurs, & on la cuit de nouveau. C'est quelquefois à dessein qu'on réserve la peinture aprés la premiere cuisson : quelquefois aussi on n'a recours à cette

seconde cuisson, que pour cacher les défauts de la porcelaine, en appliquant des couleurs dans les endroits défectueux. Cette porcelaine qui est chargée de couleurs ne laisse pas d'estre au goust de bien des gens. Il arrive d'ordinaire qu'on sent des inégalitez sur ces sortes de porcelaine, soit que cela vienne du peu d'habileté de l'ouvrier, soit que cela ait esté necessaire pour suppléer aux ombres de la peinture, ou bien qu'on ait voulu couvrir les défauts du corps de la porcelaine. Quand la peinture est seche aussi-bien que la dorure, s'il y en a, on fait des piles de ces porcelaines, & mettant les petites dans les grandes, on les range dans le fourneau.

Ces sortes de fourneaux peuvent estre de fer, quand ils sont petits ; mais d'ordinaire ils sont de terre. Celuy que j'ay vû estoit de la hauteur d'un homme, & presque aussi large que nos plus grands tonneaux de vin : il estoit fait de plusieurs pieces de la matiere mesme dont on fait les quaisses de la porcelaine : c'estoit de grands quartiers épais d'un travers de doigt, hauts d'un pied, & longs d'un pied & demi. Avant que de les cuire on leur avoit donné une figure propre à s'arrondir : ils estoient placez les uns sur les autres, & bien cimentez : le fond du fourneau estoit élevé de terre d'un demi pied ; il estoit placé sur deux ou trois rangs de briques épaisses, mais peu larges : au tour du fourneau estoit une enceinte de briques bien maçonnée, laquelle avoit en bas trois ou quatre soupiraux qui sont comme les soufflets du foyer. Cette enceinte laissoit jusqu'au fourneau un vuide d'un demi pied, excepté en trois ou quatre endroits qui estoient remplis, & qui faisoient comme les éperons du fourneau. Je croy qu'on éleve en mesme temps & le fourneau & l'enceinte, sans quoi le fourneau ne sçauroit se soutenir. On remplit le fourneau de la porcelaine qu'on veut cuire une seconde fois, en mettant en pile les petites pieces dans les grandes, ainsi que je l'ay dit. Quand tout cela est fait, on couvre le haut du fourneau de pieces de poterie semblables à celles du costé du fourneau : ces pieces qui enjambent les unes dans les autres, s'unissent étroitement avec du mortier ou de la terre détrempée. On laisse seulement au milieu une ouverture pour observer quand la porcelaine est cuite. On allume ensuite quantité de charbon sous le fourneau, on en allume pareillement sur la couverture, d'où l'on en jette des monceaux dans l'espace qui est entre l'enceinte de brique & le fourneau. L'ouverture qui est au dessus du fourneau se couvre d'une piece de pot cassé. Quand le feu est ardent, on regarde de temps en temps par cette ouverture, & lorsque la porcelaine paroist éclatante & peinte de couleurs vives et animées, on retire le brasier, & ensuite la porcelaine.

Il me vient une pensée au sujet de ces couleurs qui s'incorporent dans une porcelaine déja cuite & vernissée par le moyen de la ceruse, à laquelle, selon les Annales de *Feou leam*, on joignoit autrefois du salpêtre & de la couperose : si l'on employoit

pareillement de la ceruse dans les couleurs dont on peint des panneaux de verre, & qu'ensuite on leur donnast une espece de seconde cuisson, cette ceruse ainsi employée, ne pourroit-elle pas nous rendre le secret qu'on avoit autrefois de peindre le verre, sans luy rien oster de sa transparence ? C'est dequoy on pourra juger par l'épreuve.

Ce secret que nous avons perdu, me fait souvenir d'un autre secret que les Chinois se plaignent de n'avoir plus : ils avoient l'art de peindre sur les costez d'une porcelaine, des poissons, ou d'autres animaux, qu'on n'appercevoit que lorsque la porcelaine estoit remplie de quelque liqueur. Ils appellent cette espece de porcelaine *kia tsim*, c'est à dire, azur mis en presse, à cause de la maniere dont l'azur est placé. Voicy ce qu'on a retenu de ce secret, peut-estre imaginera-t-on en Europe ce qui est ignoré des Chinois. La porcelaine qu'on veut peindre ainsi, doit estre fort mince : quand elle est seche, on applique la couleur un peu forte, non en dehors selon la coustume, mais en dedans sur les costez : on y peint communément des poissons, comme s'ils estoient plus propres à se produire lorsqu'on remplit la tasse d'eau. La couleur une fois sechée, on donne une legere couche d'une espece de colle fort déliée faite de la terre mesme de la porcelaine. Cette couche serre l'azure entre ces deux especes de lames de terre. Quand la couche est seche, on jette de l'huile en dedans de la porcelaine : quelque temps aprés on la met sur le moule & au tour. Comme elle a reçû du corps par le dedans, on la rend par dehors la plus mince qui se peut, sans percer jusqu'à la couleur : ensuite on plonge dans l'huile le dehors de la porcelaine. Lorsque tout est sec, on la cuit dans le fourneau ordinaire. Ce travail est extrémement délicat, & demande une adresse que les Chinois apparemment n'ont plus. Ils taschent neanmoins de temps en temps de retrouver l'art de cete peinture magique, mais c'est en vain. L'un d'eux m'a assuré depuis peu qu'il avoit fait une nouvelle tentative, & qu'elle luy avoit presque réüssi.

Quoyqu'il en soit, on peut dire qu'encore aujourd'huy le bel azur renaist sur la porcelaine aprés en avoir disparu. Quand on l'a appliqué, sa couleur est d'un noir pâle : lorsqu'il est sec, & qu'on luy a donné l'huile, il s'éclypse tout à fait, & la porcelaine paroist toute blanche : les couleurs sont alors ensevelies sous le vernis : le feu les en fait éclorre avec toutes leurs beautez, de mesme à peu prés que la chaleur naturelle fait sortir de la coque les plus beaux papillons avec toutes leurs nuances. J'ajousteray une circonstance qui n'est pas à omettre, c'est qu'avant que de donner l'huile à la porcelaine, on acheve de la polir, & de luy oster les plus petites inégalitez. On se sert pour cela d'un pinceau fait de petites plumes trés-fines, on humecte le pinceau avec un peu d'eau, & on le passe par tout d'une main legere.

Au reste il y a beaucoup d'art dans la maniere dont l'huile se

donne à la porcelaine, soit pour n'en pas mettre plus qu'il ne faut, soit pour la répandre également de tous costez. A la porcelaine qui est fort mince & fort déliée, on donne à deux fois deux couches legeres d'huile : si les couches estoient trop épaisses, les foibles parois de la tasse ne pourroient les porter, & ils plieroient sur le champ. Ces deux couches valent autant qu'une couche ordinaire d'huile, telle qu'on la donne à la porcelaine fine qui est plus robuste. Elles se mettent l'une par aspersion, & l'autre par immersion. D'abord on prend d'une main la tasse par le dehors, & la tenant de biais sur l'urne où est le vernis, de l'autre main on jette dedans autant qu'il faut de vernis pour l'arroser par tout. Cela se fait de suite à un grand nombre de tasses : les premieres se trouvant seches en dedans, on leur donne l'huile au dehors de la maniere suivante : on tient une main dans la tasse, & la soustenant avec un petit baston sous le milieu de son pied, on la plonge dans le vase plein de vernis, d'où on la retire aussi-tost.

J'ay dit plus haut que le pied de la porcelaine demeuroit massif : en effet ce n'est qu'aprés qu'elle a reçû l'huile & qu'elle est seche, qu'on la met sur le tour pour creuser le pied, aprés quoy on y peint un petit cercle, & souvent une lettre Chinoise. Quand cette peinture est seche, on vernisse le creux qu'on vient de faire sous la tasse, & c'est la derniere main qu'on luy donne, car aussi-tost aprés elle se porte du laboratoire au fourneau pour y estre cuite.

J'ay esté surpris de voir qu'un homme tienne en équilibre sur ses épaules deux planches longues & étroites sur lesquelles sont rangées les porcelaines, & qu'il passe ainsi par plusieurs ruës fort peuplées sans briser sa marchandise. A la verité on évite avec soin de le heurter tant soit peu, car on seroit obligé de réparer le tort qu'on luy auroit fait : mais il est étonnant que le porteur luy-mesme regle si bien ses pas & tous les mouvemens de son corps, qu'il ne perde rien de son équilibre.

L'endroit où sont les fourneaux presente une autre scene. Dans une espece de vestibule qui précede le fourneau, on voit des tas de quaisses & d'étuis faits de terre, & destinez à renfermer la porcelaine. Chaque piece de porcelaine, pour peu qu'elle soit considerable, a son étuy, les porcelaines qui ont des couvercles comme celles qui n'en ont pas. Ces couvercles qui ne s'attachent que foiblement à la partie d'en-bas durant la cuisson, s'en détachent aisément par un petit coup qu'on leur donne. Pour ce qui est des petites porcelaines, comme sont les tasses à prendre du thé ou du chocolat, elles ont une quaisse commune à plusieurs. L'ouvrier imite icy la nature, qui pour cuire les fruits & les conduire à une parfaite maturité, les renferme sous une envelope, afin que la chaleur du Soleil ne les pénetre que peu à peu, & que son action au dedans ne soit pas trop interrompuë par l'air qui vient de dehors durant les fraischeurs de la nuit.

Ces étuis ont au dedans une espece de petit duvet de sable; on le couvre de poussiere de *kao lin*, afin que le sable ne s'attache pas trop au pied de la coupe qui se place sur ce lict de sable, aprés l'avoir pressé en luy donnant la figure du fond de la porcelaine laquelle ne touche point aux parois de son étuy. Le haut de cet étuy n'a point de couvercle: un second étuy de la figure du premier garni pareillement de sa porcelaine, s'enchasse dedans de telle sorte, qu'il le couvre tout à fait sans toucher à la porcelaine d'en bas: & c'est ainsi qu'on remplit le fourneau de grandes piles de quaisses de terre toutes garnies de porcelaine. A la faveur de ces voiles épais, la beauté, & si j'ose m'exprimer ainsi, le teint de la porcelaine n'est point halé par l'ardeur du feu.

Au regard des petites pieces de porcelaine qui sont renfermées dans de grandes quaisses rondes, chacune est posée sur une sous coupe de terre de l'épaisseur de deux écus, & de la largeur de son pied: ces bases sont aussi semées de poussiere de *kao lin*. Quand ces quaisses sont un peu larges, on ne met point de porcelaine au milieu, parce qu'elle y seroit trop éloignée des costez, qui par-là elle pourroit manquer de force, s'ouvrir, & s'enforcer, ce qui feroit du ravage dans toute la colomne. Il est bon de sçavoir que ces quaisses ont le tiers d'un pied en hauteur, & qu'en partie elles ne sont pas cuites non plus que la porcelaine. Neanmoins on remplit entierement celles qui ont déja esté cuites, & qui peuvent encore servir.

Il ne faut pas oublier la maniere dont la porcelaine se met dans ces quaisses: l'ouvrier ne la touche pas immediatement de la main; il pourroit ou la casser, car rien n'est plus fragile, ou la faner, ou luy faire des inégalitez. C'est par le moyen d'un petit cordon qu'il la tire de dessus la planche. Ce cordon tient d'un costé à deux branches un peu courbées d'une fourchette de bois qu'il prend d'une main, tandis que de l'autre il tient les deux bouts du cordon croisez & ouverts selon la largeur de la porcelaine: c'est ainsi qu'il l'environne, qu'il l'éleve doucement, & qu'il la pose dans la quaisse sur la petite sous coupe. Tout cela se fait avec une vitesse incroyable.

J'ay dit que le bas du fourneau a un demi pied de gros gravier: ce gravier sert à asseoir plus seurement les colomnes de porcelaine, dont les rangs qui sont au milieu du fourneau ont au moins sept pieds de hauteur. Les deux quaisses qui sont au bas de chaque colomne sont vuides, parce que le feu n'agit pas assez en bas, & que le gravier les couvre en partie. C'est par la mesme raison que la quaisse qui est placée au haut de la pile demeure vuide. On remplit ainsi tout le fourneau, ne laissant de vuide qu'à l'endroit qui est immediatement sous le soupirail.

On a soin de placer au milieu du fourneau les piles de la plus fine porcelaine: dans le fonds, celles qui le sont moins; & à l'entrée, on met celles qui sont un peu fortes en couleur, qui sont composées d'une matiere où il entre autant de *pe tun tse*

que de *kao lin*, & ausquelles on a donné une huile faite de la pierre qui a des taches un peu noires ou rousses, parce que cette huile a plus de corps que l'autre. Toutes ces piles sont placées fort prés les unes des autres, & liées en haut, en bas, & au milieu avec quelques morceaux de terre qu'on leur applique, de telle sorte pourtant que la flamme ait un passage libre pour s'insinuer également de tous costez : & peut-estre est-ce là à quoy l'œil & l'habileté de l'ouvrier servent le plus pour réüssir dans son entreprise, afin d'éviter certains accidens à peu prés semblables à ceux que causent les obstructions dans le corps de l'animal.

Toute terre n'est pas propre à construire les quaisses qui renferment la porcelaine ; il y en a de trois sortes qu'on met en usage : l'une qui est jaune & assez commune ; elle domine par la quantité & fait la base. L'autre s'appelle *lao tou*, c'est une terre forte. La troisiéme qui est une terre huileuse, se nomme *yeou tou*. Ces deux sortes de terre se tirent en hyver de certaines mines fort profondes, où il n'est pas possible de travailler pendant l'esté. Si on les mesloit parties égales, ce qui cousteroit un peu plus, les quaisses dureroient long-temps. On les apporte toutes préparées d'un gros Village qui est au bas de la riviere à une lieuë de *Kim te tchim*. Avant qu'elles soient cuites elles sont jaunastres : quand elles sont cuites, elles sont d'un rouge fort obscur. Comme on va à l'épargne, la terre jaune y domine, & c'est ce qui fait que les quaisses ne durent gueres que deux ou trois fournées, aprés quoy elles éclatent tout à fait. Si elles ne sont que legerement feslées ou fenduës, on les entoure d'un cercle d'osier, le cercle se brusle & la quaisse sert encore cette fois-là, sans que la porcelaine en souffre. Il faut prendre garde de ne pas remplir une fournée de quaisses neuves, lesquelles n'ayent pas encore servi : il y en faut mettre la moitié qui ayent déja esté cuites. Celles-cy se placent en haut & en bas, au milieu des piles se mettent celles qui sont nouvellement faites. Autrefois, selon l'Histoire de *Feou leam*, toutes les quaisses se cuisoient à part dans un fourneau, avant qu'on s'en servist pour y faire cuire la porcelaine : sans doute parce qu'alors on avoit moins d'égard à la dépense qu'à la perfection de l'ouvrage. Il n'en est pas tout à fait de mesme à present, & cela vient apparemment de ce que le nombre des ouvriers en porcelaine s'est multiplié à l'infini.

Venons maintenant à la construction des fourneaux. On les place au fonds d'un assez long vestibule qui sert comme de soufflets, & qui en est la décharge. Il a le mesme usage que l'arche des Verreries. Les fourneaux sont presentement plus grands qu'ils n'estoient autrefois. Alors, selon le Livre Chinois, ils n'avoient que six pieds de hauteur & de largeur : maintenant ils sont hauts de deux brasses & ont prés de quatre brasses de profondeur. La voute aussi bien que le corps du fourneau

est assez épaisse pour pouvoir marcher dessus sans estre incommodé du feu : cette voute n'est en dedans ny plate ny formée en pointe : elle va en s'allongeant, & elle se retraissit à mesure qu'elle approche du grand soupirail qui est à l'extrémité, & par où sortent les tourbillons de flamme & de fumée. Outre cette gorge le fourneau a sur sa teste cinq petites ouvertures qui en sont comme les yeux : on les couvre de quelques pots cassez, de telle sorte pourtant qu'ils soulagent l'air & le feu du fourneau. C'est par ces yeux qu'on juge si la porcelaine est cuite : on découvre l'œil qui est un peu devant le grand soupirail, & avec une pincette de fer l'on ouvre une des quaisses. La porcelaine est en estat, quand on voit un feu clair dans le fourneau, quand toutes les quaisses sont embrasées, & sur-tout quand les couleurs saillissent avec tout leur éclat. Alors on discontinuë le feu, & l'on acheve de murer pour quelque temps la porte du fourneau. Ce fourneau a dans toute sa largeur un foyer profond & large d'un ou de deux pieds, on le passe sur une planche pour entrer dans la capacité du fourneau, & y ranger la porcelaine. Quand on a allumé le feu du foyer, on mure aussi-tost la porte, n'y laissant que l'ouverture necessaire pour y jetter des quartiers de gros bois longs d'un pied, mais assez étroits. On chauffe d'abord le fourneau pendant un jour & une nuit, ensuite deux hommes qui se relevent, ne cessent d'y jetter du bois : on en brusle communément pour une fournée jusqu'a cent quatre-vingt charges. A en juger par ce qu'en dit le Livre Chinois, cette quantité ne devroit pas estre suffisante : il assure qu'anciennement on brusloit deux cens quarante charges de bois, & vingt de plus si le temps estoit pluvieux, bien qu'alors les fourneaux fussent moins grands de la moitié que ceux-cy. On y entretenoit d'abord un petit feu pendant sept jours & sept nuits ; le huitiéme jour on faisoit un feu trés ardent ; & il est à remarquer que les quaisses de la petite porcelaine estoient déja cuites à part avant que d'entrer dans le fourneau : aussi faut-il avoüer que l'ancienne porcelaine avoit bien plus de corps que la moderne. On observoit encore une chose qui se neglige aujourd'huy : quand il n'y avoit plus de feu dans le fourneau, on ne démuroit la porte qu'aprés dix jours pour les grandes porcelaines, & aprés cinq jours pour les petites : maintenant on differe à la verité de quelques jours à ouvrir le fourneau, & à en retirer les grandes pieces de porcelaine, car sans cette précaution elles éclateroient : mais pour ce qui est des petites, si le feu a esté éteint à l'entrée de la nuit, on les retire dés le lendemain. Le dessein apparemment est d'épargner le bois pour une seconde fournée. Comme la porcelaine est bruslante, l'ouvrier qui la retire, s'aide, pour la prendre, de longues écharpes penduës à son col.

J'ay esté surpris d'apprendre qu'aprés avoir bruslé dans un jour à l'entrée du fourneau jusqu'à cent quatre-vingt charges de

bois, cependant le lendemain on ne trouvoit point de cendres dans le foyer. Il faut que ceux qui servent ces fourneaux soient bien accoustumez au feu: on dit qu'ils mettent du sel dans leur thé, afin d'en boire tant qu'ils veulent sans en estre incommodez; j'ay peine à comprendre comment il se peut faire que cette liqueur salée les desaltere.

Aprés ce que je viens de rapporter, on ne doit pas estre surpris que la porcelaine soit si chere en Europe: on le sera encore moins, quand on sçaura qu'outre le gros gain des Marchands Europeans, & celuy que font sur eux leurs Commissionnaires Chinois, il est rare qu'une fournée réüssisse entierement, que souvent elle est toute perduë, & qu'en ouvrant le fourneau on trouve les porcelaines & les quaisses réduites à une masse dure comme un rocher, qu'un trop grand feu ou des quaisses mal conditionnées peuvent tout ruiner, qu'il n'est pas aisé de regler le feu qu'on leur doit donner, que la nature du temps change en un instant l'action du feu, la qualité du sujet sur lequel il agit, & celle du bois qui l'entretient. Ainsi pour un ouvrier qui s'enrichit, il y en a cent autres qui se ruinent, & qui ne laissent pas de tenter fortune, dans l'esperance dont ils se flattent de pouvoir amasser dequoy lever une boutique de Marchand.

D'ailleurs la porcelaine qu'on transporte en Europe, se fait presque toûjours sur des modeles nouveaux, souvent bisarres, & où il est difficile de réüssir: pour peu qu'elle ait de défaut, elle est rebutée des Europeans qui ne veulent rien que d'achevé, & dés-là elle demeure entre les mains des ouvriers, qui ne peuvent la vendre aux Chinois parce qu'elle n'est pas de leur goust. Il faut par conséquent que les pieces qu'on prend portent les frais de celles qu'on rebute.

Selon l'Histoire de *Kim te tchim* le gain qu'on faisoit autrefois estoit beaucoup plus considerable que celuy qui se fait maintenant; c'est ce qu'on a de la peine à croire, car il s'en faut bien qu'il se fist alors un si grand débit de porcelaine en Europe. Je croy pour moy que cela vient de ce que les vivres sont maintenant bien plus chers, de ce que le bois ne se tirant plus des montagnes voisines qu'on a épuisées, on est obligé de le faire venir de fort loin & à grands frais; de ce que le gain est partagé maintenant entre trop de personnes; & qu'enfin les ouvriers sont moins habiles qu'ils ne l'estoient dans ces temps reculez, & que par-là ils sont moins seurs de réüssir. Cela peut venir encore de l'avarice des Mandarins, qui occupant beaucoup d'ouvriers à ces sortes d'ouvrages, dont ils font des presens à leurs Protecteurs de la Cour, payent mal les ouvriers, ce qui cause le rencherissement des marchandises & la pauvreté des Marchands.

J'ay dit que la difficulté qu'il y a d'executer certains modeles venus d'Europe, est une des choses qui augmente le prix de la porcelaine: car il ne faut pas croire que les ouvriers puissent

travailler sur tous les modeles qui leur viennent des payis étrangers. Il y en a d'impraticables à la Chine, de mesme qu'il s'y fait des ouvrages qui surprennent les étrangers, & qu'ils ne croyent pas possibles. En voicy quelques exemples. J'ay vû icy un fanal ou une grosse lanterne de porcelaine qui estoit d'une seule piece, au travers de laquelle un flambeau éclairoit toute une chambre : cet ouvrage fut commandé il y a sept ou huit ans par le Prince heritier. Ce mesme Prince commanda aussi divers instrumens de Musique, entre autres une espece de petite orgue appellée *tsem*, qui a prés d'un pied de hauteur, & qui est composée de quatorze tuyaux, dont l'harmonie est assez agréable : mais ce fut inutilement qu'on y travailla. On réüssit mieux aux flustes douces, aux flageollets, & à un autre instrument qu'on nomme *yun lo*, qui est composé de diverses petites plaques rondes un peu concaves, dont chacune rend un son particulier : on en suspend neuf dans un quadre à divers étages qu'on touche avec des baguettes comme le tympanon ; il se fait un petit carillon qui s'accorde avec le son des autres instrumens, & avec la voix des Musiciens. Il a fallu, dit-on, faire beaucoup d'épreuves, afin de trouver l'épaisseur & le degré de cuisson convenables, pour avoir tous les tons necessaires à un accord. Je m'imaginois qu'on avoit le secret d'inserer un peu de métal dans le corps de ces porcelaines, pour varier les sons : mais on m'a détrompé ; le métal est si peu capable de s'allier avec la porcelaine, que si l'on mettoit un denier de cuivre au haut d'une pile de porcelaine placée dans le four, ce denier venant à se fondre perceroit toutes les quaisses & toutes les porcelaines de la colomne, qui se trouveroient toutes avoir un trou au milieu. Rien ne fait mieux voir quel mouvement le feu donne à tout ce qui est renfermé dans le fourneau : aussi assure-t-on que tout y est comme fluide & flottant.

Pour revenir aux ouvrages des Chinois un peu rares, ils réüssissent principalement dans les grotesques & dans la representation des animaux : les ouvriers font des canards & des tortûës qui flottent sur l'eau. J'ay vû un chat peint au naturel, on avoit mis dans sa teste une petite lampe dont la flamme formoit les deux yeux, & l'on m'assura que pendant la nuit les rats en estoient épouvantez. On fait encore icy beaucoup de statuës de *Kouan in* (c'est une Déesse celebre dans toute la Chine) on la represente tenant un enfant entre ses bras, & elle est invoquée par les femmes steriles qui veulent avoir des enfans. Elle peut estre comparée aux statuës antiques que nous avons de Venus & de Diane, avec cette difference que les statuës de *Kouan in* sont trés-modestes.

Il y a une autre espece de porcelaine dont l'execution est trés-difficile, & qui par-là devient fort rare. Le corps de cette porcelaine est extrémement délié, & la surface en est trés unie au dedans & au dehors : cependant on y voit des moulures gravées, un tour de fleurs, par exemple, & d'autres ornemens semblables.

Voicy de quelle maniere on la travaille : au sortir de dessus la rouë on l'applique sur un moule, où sont des gravûres qui s'y impriment en dedans : en dehors on la rend la plus fine & la plus déliée qu'il est possible en la travaillant au tour avec le ciseau ; aprés quoy on luy donne l'huile, & on la cuit dans le fourneau ordinaire.

Les Marchands Europeans demandent quelquefois aux ouvriers Chinois des plaques de porcelaine, dont une piece fasse le dessus d'une table & d'une chaise, ou des quadres de tableau : ces ouvrages sont impossibles : les plaques les plus larges & les plus longues sont d'un pied ou environ : si on va au delà, quelque épaisseur qu'on leur donne, elles se déjettent : l'épaisseur mesme ne rendroit pas plus facile l'execution de ces sortes d'ouvrages, & c'est pourquoy au lieu de rendre ces plaques épaisses, on les fait de deux superficies qu'on unit en laissant le dedans vuide : on y met seulement une traverse, & l'on fait aux deux costez deux ouvertures pour les enchasser dans des ouvrages de menuiserie, ou dans le dossier d'une chaise ; ce qui a son agrément.

L'Histoire de *Kim te tchim* parle de divers ouvrages ordonnez par des Empereurs, qu'on s'efforça vainement d'executer. Le pere de l'Empereur regnant commanda des urnes à peu près de la figure des quaisses où nous mettons des oranges : c'estoit apparemment pour y nourrir de petits poissons rouges, dorez & argentez ; ce qui fait un ornement des maisons : peut-estre aussi vouloit-il s'en servir pour y prendre le bain, car elles devoient avoir trois pieds & demi de diametre, & deux pieds & demi de hauteur : le fonds devoit estre épais d'un demi-pied, & les parois d'un tiers de pied. On travailla trois ans de suite à ces ouvrages, & on fit jusqu'à deux cens urnes sans qu'une seule pust réüssir. Le mesme Empereur ordonna des plaques pour des devants de galerie ouverte ; chaque plaque devoit estre haute de trois pieds, large de deux pieds & demi, & épaisse d'un demi-pied : tout cela, disent les Annales de *Kim te tchim*, ne put s'executer, & les Mandarins de cette Province presenterent une Requeste à l'Empereur, pour le supplier de faire cesser ce travail.

Cependant les Mandarins qui sçavent quel est le genie des Europeans en fait d'invention, m'ont quelquefois prié de faire venir d'Europe des desseins nouveaux & curieux, afin de pouvoir presenter à l'Empereur quelque chose de singulier. D'un autre costé les Chrestiens me pressoient fort de ne point fournir de semblables modeles, car les Mandarins ne sont pas tout à fait si faciles à se rendre que nos Marchands, lorsque les ouvriers leur disent qu'un ouvrage est impractiquable, & il y a souvent bien des bastonnades données, avant que le Mandarin abandonne un dessein dont il se promettoit de grands avantages.

Comme chaque profession a son Idole particuliere, & que la

divinité se communique icy aussi facilement, que la qualité de Comte & de Marquis se donne en certains payis d'Europe, il n'est pas surprenant qu'il y ait un Dieu de la porcelaine. Le *Pou sa* (c'est le nom de cette Idole) doit son origine à ces sortes de desseins qu'il est impossible aux ouvriers d'executer. On dit qu'autrefois un Empereur voulut absolument qu'on lui fist des porcelaines sur un modele qu'il donna : on luy representa diverses fois que la chose estoit impossible ; mais toutes ces remonstrances ne servirent qu'à exciter de plus en plus son envie. Les Empereurs sont durant leur vie les Divinitez les plus redoutées à la Chine, & ils croyent souvent que rien ne doit s'opposer à leurs desirs. Les Officiers redoublerent donc leurs soins, & ils userent de toute sorte de rigueur à l'égard des ouvriers. Ces malheureux dépensoient leur argent, se donnoient bien de la peine, & ne recevoient que des coups. L'un d'eux dans un mouvement de désespoir se lança dans le fourneau allumé, & il y fut consumé à l'instant. La porcelaine qui s'y cuisoit en sortit, dit-on, parfaitement belle & au gré de l'Empereur, lequel n'en demanda pas davantage. Depuis ce temps-là cet infortuné passa pour un Heros, & il devint dans la suite l'Idole qui preside aux travaux de la porcelaine. Je ne sçache pas que son élevation ait porté d'autres Chinois à prendre la mesme route en vûë d'un semblable honneur.

La porcelaine étant dans une si grande estime depuis tant de siecles, peut-estre souhaiteroit-on sçavoir en quoy celle des premiers temps differe de celle de nos jours, & quel est le jugement qu'en portent les Chinois. Il ne faut pas douter que la Chine n'ait ses Antiquaires, qui se préviennent en faveur des anciens ouvrages. Le Chinois mesme est naturellement porté à respecter l'antiquité : on trouve pourtant des défenseurs du travail moderne : mais il n'en est pas de la porcelaine comme des medailles antiques, qui donnent la science des temps reculez. La vieille porcelaine peut estre ornée des quelques caracteres Chinois, mais qui ne marquent aucun point d'histoire : ainsi les Curieux n'y peuvent trouver qu'un goust & des couleurs, qui la leur font préferer à celle de nos jours. Je crois avoir oüi dire lorsque j'estois en Europe, que la porcelaine, pour avoir sa perfection, devoit avoir esté long-tems ensevelie en terre : c'est une fausse opinion dont les Chinois se mocquent. L'Histoire de *Kim te tchim* parlant de la plus belle porcelaine des premiers tems, dit qu'elle estoit si recherchée, qu'à peine le fourneau estoit-il ouvert, que les Marchands se disputoient à qui seroit le premier partagé. Ce n'est pas là supposer qu'elle dust estre enterrée.

Il est vray qu'en creusant dans les ruines des vieux bastimens, & sur-tout en nettoyant de vieux puits abandonnez, on y trouve quelque fois de belles pieces de porcelaine qui y ont esté cachées dans des temps de révolution : cette porcelaine est belle, parce

qu'alors on ne s'avisoit gueres d'enfoüir que celle qui estoit précieuse, afin de la retrouver aprés la fin des troubles. Si elle est estimée, ce n'est pas parce qu'elle a acquis dans le sein de la terre quelque nouveau degré de beauté, mais c'est parce que son ancienne beauté s'est conservée, & cela seul a son prix à la Chine, où l'on donne de grosses sommes pour les moindres ustenciles de simple poterie dont se servoient les Empereurs *Yao* & *Chun*, qui ont regné plusieurs siecles avant la Dynastie des *Tam*, auquel temps la porcelaine commença d'estre à l'usage des Empereurs. Tout ce que la porcelaine acquiert en vieillissant dans la terre, c'est quelque changement qui se fait dans son coloris, ou si vous voulez dans son teint, qui fait voir qu'elle est vieille. La même chose arrive au marbre & à l'yvoire, mais plus promptement, parce que le vernis empêche l'humidité de s'insinuer si aisément dans la porcelaine. Ce que je puis dire, c'est que j'ay trouvé dans de vieilles masures des pieces de porcelaine qui estoient probablement fort anciennes, & je n'y ay rien remarqué de particulier : s'il est vray qu'en vieillissant elles se soient perfectionnées, il faut qu'au sortir des mains de l'ouvrier elles n'égalassent pas la porcelaine qui se fait maintenant. Mais, ce que je crois, c'est qu'alors, comme à present, il y avoit de la porcelaine de tout prix. Selon les Annales de *Kim te tchim* il y a eu autrefois des urnes qui se vendoient chacune jusqu'à 58. & 59. taëls, c'est-à-dire plus de 80. écus. Combien se seroient-elles venduës en Europe ? Aussi, dit le Livre, y avoit-il un fourneau fait exprès pour chaque urne de cette valeur, & la dépense n'y estoit pas épargnée.

Le Mandarin de *Kim te tchim* qui m'honore de son amitié, fait à ses protecteurs de la Cour des presens de vieille porcelaine, qu'il a le talent de faire luy-mesme. Je veux dire qu'il a trouvé l'art d'imiter l'ancienne porcelaine, ou du moins celle de la basse antiquité : il employe à cet effet quantité d'ouvriers. La matiere de ces faux *Kou tom*, c'est à dire de ces antiques contrefaites, est une terre jaunastre qui se tire d'un endroit assez près de *Kim te tchim* nommé *Ma ngan chan*. Elles sont fort épaisses. Le Mandarin m'a donné une assiette de sa façon qui pese autant que dix des ordinaires. Il n'y a rien de particulier dans le travail de ces sortes de porcelaines, sinon qu'on leur donne une huile faite de pierre jaune qu'on mesle avec l'huile ordinaire, en sorte que cette derniere domine : ce meslange donne à la porcelaine la couleur d'un verd de mer. Quand elle a esté cuite on la jette dans un boüillon trés-gras fait de chapons & d'autre viande : elle s'y cuit une seconde fois, aprés quoy on la met dans un égoust le plus bourbeux qui se puisse trouver, où on la laisse un mois & davantage. Au sortir de cet égoust elle passe pour estre de trois ou quatre cens ans, ou du moins de la Dynastie précedente des *Ming*, où les porcelaines de cette couleur & de cette épaisseur estoient estimées à la Cour. Ces fausses antiques

sont encore semblables aux veritables, en ce que lorsqu'on les frappe, elles ne résonnent point, & que si on les applique auprés de l'oreille, il ne s'y fait aucun bourdonnement.

On m'a apporté des débris d'une grosse boutique une petite assiette, que j'estime beaucoup plus que les plus fines porcelaines faites depuis mille ans. On voit peint au fond de l'assiette un Crucifix entre la sainte Vierge & saint Jean : on m'a dit qu'on portoit autrefois au Japon de ces porcelaines, mais qu'on n'en fait plus depuis seize à dix-sept ans. Apparemment que les Chrestiens du Japon se servoient de cette industrie durant la persécution, pour avoir des images de nos Mysteres : ces porcelaines confonduës dans des quaisses avec les autres, échappoient à la recherche des ennemis de la Religion : ce pieux artifice aura esté découvert dans la suite, & rendu inutile par des recherches plus exactes ; & c'est ce qui fait sans doute qu'on a discontinué à *Kim te tchim* ces sortes d'ouvrages.

On est presque aussi curieux à la Chine des verres & des cristaux qui viennent d'Europe, qu'on l'est en Europe des porcelaines de la Chine : cependant quelque estime qu'en fassent les Chinois, ils n'en sont pas venus encore jusqu'à traverser les mers pour chercher du verre en Europe, ils trouvent que leur porcelaine est plus d'usage : elle souffre les liqueurs chaudes ; on peut tenir une tasse de thé boüillant sans se brusler, si on la sçait prendre à la Chinoise, ce qu'on ne peut pas faire, mesme avec une tasse d'argent de la mesme épaisseur & de la mesme figure : la porcelaine a son éclat ainsi que le verre ; & si elle est moins transparente, elle est aussi moins fragile : ce qui arrive au verre qui est fait tout récemment, arrive pareillement à la porcelaine ; rien ne marque mieux une constitution de parties à peu prés semblables : la bonne porcelaine a un son clair comme le verre : si le verre se taille avec le diamant, on se sert aussi du diamant pour réünir ensemble & coudre en quelque sorte des pieces de porcelaine cassée : c'est mesme un mestier à la Chine, on y voit des ouvriers uniquement occupez à remettre dans leurs places des pieces brisées : ils se servent du diamant comme d'une aiguille pour faire de petits trous au corps de la porcelaine, où ils entrelassent un fil de leton trés delié ; & par-là ils mettent la porcelaine en estat de servir, sans qu'on s'apperçoive presque de l'endroit où elle a esté cassée.

Je dois, avant que de finir cette Lettre qui vous paroistra peut-estre trop longue, éclaircir un doute que j'ay infailliblement fait naistre. J'ay dit qu'il vient sans cesse à *Kim te tchim* des barques chargées de *pe tun tse* & de *kao lin*, & qu'aprés les avoir purifiez, le marc qui en reste, s'accumule à la longue, & forme de fort grands monceaux. J'ay ajousté qu'il y a trois mille fourneaux à *Kim te tchim*, que ces fourneaux se remplissent de quaisses & de porcelaines, que ces quaisses ne peuvent servir au plus que trois ou quatre fournées, & que souvent toute une

fournée est perduë. Il est naturel qu'on me demande aprés cela quel est l'abysme où depuis prés de treize cens ans on jette tous ces débris de porcelaine & de fourneaux, sans qu'il ait encore esté comblé.

La situation mesme de *Kim te tchim*, & la maniere dont on l'a construit, donneront l'éclaircissement qu'on souhaite. *Kim te tchim* qui n'estoit pas fort étendu dans ses commencemens, s'est extrémement accrû par le grand nombre des édifices qu'on y a basti, & qu'on y bastit encore tous les jours : chaque édifice est environné de murailles : les briques dont ces murailles sont construites, ne sont pas couchées de plat les unes sur les autres, ni cimentées comme les ouvrages de maçonnerie d'Europe : les murailles de la Chine ont plus de grace & moins de solidité. De longues & de larges briques incrustent, pour ainsi dire, la muraille : chacune de ces briques en a une à ses costez, il n'en paroist que l'extremité à fleur de la brique du milieu, & l'une & l'autre sont comme les deux éperons de cette brique. Une petite couche de chaux mise au-tour de la brique du milieu lie toutes ces briques ensemble : les briques sont disposées de la mesme maniere au revers de la muraille : ces murailles vont en s'étrecissant à mesure qu'elles s'élevent, de sorte qu'elles n'ont gueres au haut que la longueur & la largeur d'une brique : les éperons ou les briques qui sont en travers, ne répondent nulle part à celles du costé opposé. Par-là le corps de la muraille est comme une espece de coffre vuide. Quand on a fait deux ou trois rangs de briques placées sur des fondemens peu profonds, on comble le corps de la muraille de pots cassez, sur lesquels on verse de la terre délayée en forme de mortier un peu liquide. Ce mortier lie le tout, & n'en fait qu'une masse, qui serre de toutes parts les briques de traverse ; & celles-cy serrent celles du milieu, lesquelles ne portent que sur l'épaisseur des briques qui sont au dessous. De loin ces murailles me parurent d'abord faites de belles pierres grises quarrées & polies avec le ciseau : ce qui est surprenant, c'est que si l'on a soin de bien couvrir le haut de bonnes tuiles, elles durent jusqu'à cent ans : à la verité elles ne portent point le poids de la charpente qui est soustenuë par des colomnes de gros bois, elles ne servent qu'à environner les bastimens & les jardins. Si l'on essayoit en Europe de faire de ces sortes de murailles à la Chinoise, on ne laisseroit pas d'épargner beaucoup, sur-tout en certains endroits.

On voit déja ce que deviennent en partie les débris de la porcelaine & des fourneaux. Il faut ajouster qu'on les jette d'ordinaire sur les bords de la riviere qui passe au bas de *Kim te tchim* : il arrive par-là qu'à la longue on gagne du terrain sur la riviere : ces decombres humectez par la pluye, & battus par les passans, deviennent d'abord des places propres à tenir le marché, ensuite on en fait des ruës. Outre cela dans les grandes crues d'eau, la riviere entraisne beaucoup de ces

porcelaines brisées : on diroit que son lit en est tout pavé, ce qui ne laisse pas de réjoüir la vûë. De tout ce que je viens de dire, il est aisé de juger quel est l'abysme où depuis tant de siecles on jette tous ces débris de fourneaux & de porcelaine.

Mais pour peu qu'un Missionnaire ait de zele, il se presente à son esprit une pensée bien affligeante : quel est l'abysme, me dis-je souvent à moy-mesme, où sont tombez tant de millions d'hommes, qui durant cette longue suite de siecles ont peuplé *Kim te tchim :* on voit toutes les montagnes des environs couvertes de sepulchres : au bas d'une de ces montagnes est une fosse fort large environnée de hautes murailles : c'est-là qu'on jette les corps des pauvres qui n'ont pas dequoy avoir un cercueil, ce qu'on regarde icy comme le plus grand de tous les malheurs : cet endroit s'appelle *ouan min kem*, c'est-à-dire, fosse à l'infini, fosse pour tout un monde. Dans les temps de peste qui fait presque tous les ans de grands ravages dans un lieu si peuplé, cette large fosse engloutit bien des corps, sur lesquels on jette de la chaux vive pour consumer les chairs. Vers la fin de l'année, en hyver, les Bonzes, par un acte de charité fort interessée, car il est precedé d'une bonne queste, viennent retirer les ossemens pour faire place à d'autres, & ils les bruslent durant une espece de service qu'ils font pour ces malheureux defunts.

De cette sorte les montagnes qui environnent *Kim te tchim*, presentent à la vûë la terre où sont rentrez les corps de tant de millions d'hommes qui ont subi le sort de tous les mortels ; mais quel est l'abysme où leurs ames sont tombées, & quoy de plus capable d'animer le zele d'un Missionnaire pour travailler au salut de ces Infideles, que la perte irréparable de tant d'ames pendant une si longue suite de siecles : *Kim te tchim* est redevable aux liberalitez de M. le Marquis de Broissia d'une Eglise qui a un troupeau nombreux, lequel s'augmente considerablement chaque année. Plaise au Seigneur de verser de plus en plus ses benedictions sur ces nouveaux Fideles ! Je les recommande à vos prieres : si elles estoient soustenuës de quelques secours pour augmenter le nombre des Catechistes, on seroit édifié à la Chine de voir que ce n'est pas seulement le luxe & la cupidité des Européans qui font passer leurs richesses jusqu'à *Kim te tchim* ; mais qu'il se trouve des personnes zelées qui ont des desseins beaucoup plus nobles, que celles qui en font venir des bijoux si fragiles. Je suis avec bien du respect,

MON REVEREND PERE,

Vostre tres-humble & tres-obéissant serviteur en N. S.
D'ENTRECOLLES, Missionnaire de la Compagnie de JESUS.

# LETTRE

DU

## PERE D'ENTRECOLLES, Missionnaire de la Compagnie de Jesus :

*Au P.... de la même Compagnie,*

*A Kim te tchim le 25. Janvier 1722.*

Mon Reverend Pere,

*La P. de N. S.*

Quelque soin que je me sois donné pour m'instruire de la maniere dont nos ouvriers Chinois travaillent la porcelaine, je n'ai garde de croire que j'aye entierement épuisé la matiere ; vous verrez même par les nouvelles observations que je vous envoye, que de nouvelles recherches m'ont donné sur cela de nouvelles connoissances. Je vous les exposerai, ces observations, sans ordre, & telles que je les ai tracées sur le papier, à mesure que j'ai eu occasion de les faire, soit en parcourant les boutiques des Ouvriers, & en m'instruisant par mes propres yeux ; soit en faisant diverses questions aux Chrétiens qui sont occupez à ce travail.

Du reste comme je ne dis rien de ce que j'ai déja expliqué assez au long par une de mes Lettres que vous avez inserée dans le xii. Recueil, il sera bon de la relire avec un peu d'application ; autrement on auroit peut-être de la peine à comprendre beaucoup de choses, dont je suppose avec raison qu'on a déja la connoissance.

I. Comme l'or appliqué sur la porcelaine s'efface à la longue, & perd beaucoup de son éclat, on lui rend son lustre en moüillant d'abord la porcelaine avec de l'eau nette, & en frottant ensuite la dorure avec une pierre d'agathe. Mais on doit avoir soin de frotter le vase dans un même sens, par exemple, de droite à gauche.

II. Ce sont principalement les bords de la porcelaine qui sont sujets à s'écailler : pour obvier à cet inconvenient, on les

fortifie avec une certaine quantité de charbon de bambou pilé, qu'on mêle avec le vernis qui se donne à la porcelaine: ce qui rend le vernis d'une couleur de gris cendré. Ensuite avec le pinceau on fait de cette mixtion une bordure à la porcelaine déja seche en la mettant sur la rouë ou sur le tour. Quand il est tems, on applique le vernis à la bordure, comme au reste de la porcelaine: & lorsqu'elle est cuite, ses bords n'en sont pas moins d'une extrême blancheur. Comme il n'y a point de bambou en Europe, je crois qu'on pourroit y suppléer par le charbon de saules, ou encore mieux par celui de sureau, qui a quelque chose d'approchant du bambou.

Il est à observer 1°. qu'avant que de réduire le bambou en charbon, il faut en détacher la peau verte, parce qu'on assure que la cendre de cette peau fait éclater la porcelaine dans le fourneau. 2°. que l'Ouvrier doit prendre garde de toucher la porcelaine avec des mains tachées de graisse ou d'huile: l'endroit touché éclateroit infailliblement durant la cuite.

III. En parlant des couleurs qu'on appliquoit à la porcelaine, j'ai dit * qu'il y en avoit d'un rouge soufflé, & j'ai expliqué la maniere d'appliquer cette couleur: mais je ne me souviens pas d'avoir dit qu'il y en avoit aussi de bleu soufflé, & qu'il est beaucoup plus aisé d'y réüssir. On en aura vû sans doute en Europe. Nos ouvriers conviennent que si l'on ne plaignoit pas la dépense, on pourroit de même souffler de l'or & de l'argent sur de la porcelaine, dont le fond seroit noir ou bleu; c'est-à-dire, y repandre par tout également une espece de pluye d'or ou d'argent. Cette sorte de porcelaine qui seroit d'un goût nouveau, ne manqueroit pas de plaire.

On souffle le vernis de même que le rouge. Il y a peu de tems qu'on fit pour l'Empereur des ouvrages si fins & si déliez, qu'on les mettoit sur du coton, parce qu'on ne pouvoit manier des pieces si délicates, sans s'exposer à les rompre: & comme, il n'étoit pas possible de les plonger dans le vernis, parce qu'il eût fallu les toucher de la main, on souffloit le vernis, & on en couvroit entierement la porcelaine.

J'ai remarqué qu'en soufflant le bleu, les ouvriers prennent une précaution pour conserver la couleur qui ne tombe pas sur la porcelaine, & n'en perdre que le moins qu'il est possible. Cette précaution est de placer le vase sur un piedestal, & d'étendre sous le piedestal une grande feuille de papier qui sert durant quelque tems. Quand l'azur est sec, ils le retirent en frottant le papier avec une petite brosse.

IV. On a trouvé depuis peu de tems une nouvelle matiere propre à entrer dans la composition de la porcelaine. C'est une pierre, ou une espece de craye qui s'appelle *hoa che*, dont les Medecins Chinois font une sorte de ptisanne qu'ils disent être détersive, aperitive, & rafraichissante. Ils prennent six

* Pag. 307. du XII. Recueil.

parts de cette pierre & une part de reglisse qu'ils pulverisent : ils mettent une demie cuillerée de cette poudre dans une grande tasse d'eau fraîche qu'ils font boire au malade ; & ils prétendent que cette ptisanne rafraîchit le sang & tempere les chaleurs internes. Les Ouvriers en porcelaine se sont avisez d'employer cette même pierre à la place du *Kao lin*, dont j'ai parlé dans mon premier Ecrit*. Peut-être que tel endroit de l'Europe, où l'on ne trouvera point de *Kao lin*, fournira la pierre *hoa che*. Elle se nomme *hoa*, parce qu'elle est glutineuse, & qu'elle approche en quelque sorte du savon.

La porcelaine faite avec le *hoa che* est rare & beaucoup plus chere que l'autre : elle a un grain extremement fin ; & pour ce qui regarde l'ouvrage du pinceau, si on la compare à la porcelaine ordinaire, elle est à peu près ce qu'est le velin comparé au papier. De plus cette porcelaine est d'une légereté qui surprend une main accoûtumée à manier d'autres porcelaines : aussi est-elle beaucoup plus fragile que la commune, & il est difficile d'attraper le veritable dégré de sa cuite. Il y en a qui ne se servent pas du *hoa che* pour faire le corps de l'ouvrage, ils se contentent d'en faire une colle assez déliée, ou ils plongent la porcelaine quand elle est seche, afin qu'elle en prenne une couche, avant que de recevoir les couleurs & le vernis. Par là elle acquiert quelques dégrez de beauté.

Voici de quelle maniere on met en œuvre le *hoa che* : 1° lorsqu'on l'a tiré de la mine, on le lave avec de l'eau de riviere ou de pluye, pour en séparer un reste de terre jaunâtre qui y est attachée. 2°. on le brise, on le met dans une cuve d'eau pour le dissoudre, & on le prepare en lui donnant les mêmes façons qu'au *Kao lin*. On assure qu'on peut faire de la porcelaine avec le seul *hoa che* préparé de la sorte & sans aucun autre mélange : cependant un de mes Neophytes qui a fait de semblables porcelaines, m'a dit que sur huit parts de *hoa che*, il mettoit deux parts de *petun tse* ; & que pour le reste, il procedoit selon la méthode qui s'observe quand on fait la porcelaine ordinaire avec le *petun tse* & le *Kao lin*. Dans cette nouvelle espece de porcelaine le *hoa che* tient la place du *Kao lin* ; mais l'un est beaucoup plus cher que l'autre. La charge de *Kao lin* ne coûte que 20. sols ; au lieu que celle de *hoa che* revient à un écu. Ainsi il n'est pas surprenant que cette sorte de porcelaine se vende plus cher que la commune.

Je ferai encore une observation sur le *hoa che*. Lorsqu'on l'a preparé, & qu'on l'a disposé en petits carreaux semblables à ceux du *petun tse*, on délaye dans l'eau une certaine quantité de ces petits carreaux, & on en forme une colle bien claire : ensuite on y trempe le pinceau, puis on trace sur la porcelaine divers desseins, après quoi lorsqu'elle est seche, on lui donne le vernis. Quand la porcelaine est cuite, on apperçoit ces desseins

* Voyez la page 273. du XII. Recueil.

qui sont d'une blancheur differente de celle qui est sur le corps de la porcelaine : il semble que ce soit une vapeur deliée répanduë sur la surface. Le blanc de *hoa che* s'appelle blanc d'ivoire, *siam ya pe.*

V. On peint des figures sur la porcelaine avec le *Chekao,** de même qu'avec le *hoa che,* ce qui lui donne une autre espece de couleur blanche ; mais le *Chekao* a cela de particulier, qu'avant que de le préparer comme le *hoa che,* il faut le rôtir dans le foyer : après quoi on le brise, & on lui donne les mêmes facons qu'au *hoa che* : on le jette dans un vase plein d'eau, on l'y agite, on ramasse à diverses reprises la crême qui surnage, & quand tout cela est fait, on trouve une masse pure qu'on employe de même que le *hoa che* purifié. Le *Chekao* ne sçauroit servir à former le corps de la porcelaine : on n'a trouvé jusqu'ici que le *hoa che* qui pût tenir la place du *Kaolin,* & donner de la solidité à la porcelaine. Si, à ce qu'on m'a dit, l'on mettoit plus de deux parts de *petun tse* sur huit parts de *hoa che,* la porcelaine s'affaisseroit en se cuisant, parce qu'elle manqueroit de fermeté, ou plûtôt, que ses parties ne seroient pas suffisamment liées ensemble.

VI. Je n'ai point parlé d'une espece de vernis qui s'appelle *tse kin yeou,* c'est-à-dire, vernis d'or bruni. Je le nommerois plûtôt vernis de couleur de bronze, de couleur de caffé, ou de couleur de feuille morte. Ce vernis est d'une invention nouvelle : pour le faire, on prend de la terre jaune commune, on lui donne les mêmes façons qu'au *petun tse,* & quand cette terre est préparée, on n'en employe que la matiere la plus déliée, qu'on jette dans de l'eau, & dont on forme une espece de colle aussi liquide que le vernis ordinaire appellé *pe yeou.*† Ces deux vernis le *tsekin* & le *pe yeou* se mêlent ensemble, & pour cela ils doivent être également liquides. On en fait l'épreuve en plongeant un *petun tse* dans l'un & l'autre vernis. Si chacun de ces vernis pénétre son *petun tse,* on les juge également liquides & propres à s'incorporer ensemble. On fait aussi entrer dans le *tsekin* du vernis ou de l'huile de chaux & de cendres de fougere préparée comme nous l'avons dit ailleurs & de la même liquidité que le *peyeou* : mais on mêle plus ou moins de ces deux vernis avec le *tsekin,* selon qu'on veut que le *tsekin* soit plus foncé ou plus clair. C'est ce qu'on peut connoître par divers essais : par exemple, on mêlera deux tasses de la liqueur *tsekin* avec huit tasses du *peyeou* : puis sur quatre tasses de cette mixtion de *tsekin* & de *pe yeou,* on mettra une tasse de vernis fait de chaux & de fougeres.

Il n'y a, dit-on, que vingt ans ou environ qu'on a trouvé le secret de peindre avec le *tsoui* ou en violet, & de dorer la porcelaine. On a essayé de faire une mixtion de feüille d'or avec

* Pierre ou mineral semblable à l'alun. Voyez le XII. Recueil, pag. 281.

† Vernis qui se fait de quartiers de roche.

le vernis & la poudre de caillou, qu'on appliquoit de même qu'on applique le rouge à l'huile : mais cette tentative n'a pas réüssi, & on a trouvé que le vernis *tsekin* avoit plus de grace & plus d'éclat.

Il a été un tems qu'on faisoit des tasses ausquelles on donnoit par dehors le vernis doré, & par dedans le pur vernis blanc. On a varié dans la suite, & sur une tasse ou sur un vase qu'on vouloit vernisser de *tsekin*, on appliquoit en un ou deux endroits un rond ou un quarré de papier moüillé, & après avoir donné le vernis, on levoit le papier, & avec le pinceau on peignoit en rouge ou en azur cet espace non vernissé. Lorsque la porcelaine étoit séche, on lui donnoit le vernis accoûtumé, soit en le soufflant, soit d'une autre maniere. Quelques-uns remplissent ces espaces vuides d'un fond tout d'azur ou tout noir ; pour y appliquer la dorure après la premiere cuite. C'est sur quoi on peut imaginer diverses combinaisons.

VII. On m'a montré cette année pour la premiere fois une espece de porcelaine qui est maintenant à la mode : sa couleur tire sur l'olive, on lui donne le nom de *long tsiven*. J'en ai vû qu'on nommoit *tsim ko* : c'est le nom d'un fruit qui ressemble assez aux olives. On donne cette couleur à la porcelaine en mêlant sept tasses de vernis *tsekin* avec quatre tasses de *peyeou*, deux tasses ou environ d'huile de chaux & de cendres de fougere, & une tasse de *tsoui yeou* qui est une huile faite de caillou. Le *tsoui yeou* fait appercevoir quantité de petites veines sur la porcelaine : quand on l'applique tout seul, la porcelaine est fragile, & n'a point de son lorsqu'on la frappe ; mais quand on la mêle avec les autres vernis, elle est coupée de veines, elle resonne, & n'est pas plus fragile que la porcelaine ordinaire.

Je dois ajoûter une particularité dont je n'ai point parlé & que j'ai remarqué tout récemment : c'est qu'avant qu'on donne le vernis à la porcelaine, on acheve de la polir, & d'en retrancher les plus petites inégalitez : ce qui s'execute par le moïen d'un pinceau fait de petites plumes fort fines. On humecte ce pinceau simplement avec de l'eau, & on le passe par tout d'une main legere. Mais c'est principalement pour la porcelaine fine qu'on se donne ce soin.

VIII. Le noir éclatant ou le noir de miroir appellé *ou kim* se donne à la porcelaine, en la plongeant dans une mixtion liquide composée d'azur préparé : il n'est pas nécessaire d'y employer le bel azur, mais il faut qu'il soit un peu épais & mêlé avec du vernis *peyeou* & du *tsekin*, en y ajoûtant un peu d'huile de chaux & de cendres de fougeres : par exemple, sur dix onces d'azur pilé dans le mortier, on mêlera une tasse de *tsekin*, sept tasses de *peyeou* & deux tasses d'huile de cendres de fougeres brûlées avec la chaux. Cette mixtion porte son vernis avec elle, & il n'est pas nécessaire d'en donner de nouveau. Quand on cuit

cette sorte de porcelaine noire, on doit la placer vers le milieu du fourneau, & non pas près de la voute, où le feu a le plus d'activité.

IX. Je me suis trompé lorsque j'ai dit * que le rouge à l'huile appellé *yeou li hum*, se tiroit de rouge fait du couperose, tel qu'on l'employe pour peindre en rouge la porcelaine recuite. Ce rouge à l'huile se fait de la grenaille de cuivre rouge, & de la poudre d'une certaine pierre ou caillou qui tire un peu sur le rouge. Un Medecin Chrétien m'a dit que cette pierre étoit une espece d'alun qu'on employe dans la médecine. On broye le tout dans un mortier, en y mêlant de l'urine d'un jeune homme, & de l'huile de *peyeou* : mais je n'ai pû découvrir la quantité de ces ingrédiens : ceux qui ont ce secret, sont attentifs à ne le pas divulguer. On applique cette mixtion sur la porcelaine, lorsqu'elle n'est pas encore cuite, & on ne lui donne point d'autre vernis. Il faut seulement prendre garde que durant la cuite la couleur rouge ne coule point au bas du vase. On m'a assuré que quand on veut donner ce rouge à la porcelaine, on ne se sert point de *petun tse* pour la former, mais qu'en sa place on employe avec le *kao lin* de la terre jaune préparée de la même maniere que les *petun tse.* Il est vraisemblable qu'une pareille terre est plus propre à recevoir cette sorte de couleur.

Peut-être sera-t'on bien aise d'apprendre comment cette grenaille de cuivre se prepare. On sçait qu'à la Chine il n'y a point d'argent monnoyé ; on se sert d'argent en masse dans le commerce, & il s'y trouve beaucoup de pieces qui sont de bas alloi. Il y a cependant des occasions où il faut les reduire en argent fin ; comme par exemple, quand il s'agit de payer la taille ou de semblables contributions. Alors on a recours à des ouvriers dont l'unique mêtier est d'affiner l'argent dans des fourneaux faits à ce dessein, & d'en séparer le cuivre & le plomb. Ils forment la grenaille de ce cuivre, qui vraisemblablement conserve quelques parcelles imperceptibles d'argent ou de plomb. Avant que le cuivre liquefié se durcisse & se congele, on prend un petit balai, qu'on trempe légerement dans l'eau, puis en frappant sur le manche du balai, on asperge d'eau le cuivre fondu : une pellicule se forme sur la superficie, qu'on leve avec de petites pincettes de fer, & on la plonge dans de l'eau froide où se forme la grenaille qui se multiplie autant qu'on reïtere l'opération. Je crois que si l'on employoit de l'eau forte pour dissoudre le cuivre, cette poudre de cuivre en seroit plus propre pour faire le rouge dont je parle. Mais les Chinois n'ont point le secret des eaux fortes & regales ; leurs inventions sont toutes d'une extrême simplicité.

X. On a exécuté cette année des desseins d'ouvrage qu'on assuroit être impraticables. Ce sont des urnes hautes de trois

* XII. Recueil pag. 302.

pieds & davantage, sans le couvercle qui s'éleve en pyramide à la hauteur d'un pied. Ces urnes sont des trois pieces rapportées, mais réunies ensemble avec tant d'art & de propreté, qu'elles ne font qu'un seul corps, sans qu'on puisse découvrir l'endroit de la réunion. On m'a dit en me les montrant, que de quatre-vingts urnes qu'on avoit faites, on n'avoit pû réüssir qu'à huit seulement, & que toutes les autres avoient été perduës. Ces ouvrages étoient commandez par des Marchands de Canton qui commercent avec les Européans: car à la Chine on n'est point curieux de porcelaines qui soient d'un si grand prix.

XI. On m'a apporté une de ces pieces de porcelaine qu'on appelle *yao pien* ou transmutation. Cette transmutation se fait dans le fourneau, & est causée ou par le défaut ou par l'excès de chaleur, ou bien par d'autres causes qu'il n'est pas facile de conjecturer. Cette piece qui n'a pas réüssi selon l'idée de l'ouvrier, & qui est l'effet du pur hazard, n'en est pas moins belle ni moins estimée. L'ouvrier avoit dessein de faire des vases de rouge soufflé: cent pieces furent entierement perduës: celle dont je parle sortit du fourneau semblable à une espece d'agathe. Si l'on vouloit courir les risques & les frais de differentes épreuves, on découvriroit à la fin l'art de faire sûrement, ce que le hazard a produit une seule fois. C'est ainsi qu'on s'est avisé de faire de la porcelaine d'un noir éclatant qu'on appelle *ou kim*: le caprice du fourneau a déterminé à cette recherche, & on y a réussi.

XII. Quand on veut donner un vernis qui rende la porcelaine extrémement blanche, on met sur treize tasses de *pe yeou*, une tasse de cendres de fougeres aussi liquides que le *pe yeou*. Ce vernis est fort & ne se doit point donner à la porcelaine qu'on veut peindre en bleu, parce que après la cuite, la couleur ne paroîtroit pas à travers le vernis. La porcelaine à laquelle on a donné le fort vernis, peut être exposée sans crainte au grand feu du fourneau. On la cuit ainsi toute blanche, ou pour la conserver dans cette couleur, ou bien pour la dorer, ou la peindre de differentes couleurs, & ensuite la recuire. Mais quand on veut peindre la porcelaine en bleu, & que la couleur paroisse après la cuite, il ne faut mêler que sept tasses de *pe yeou*, avec une tasse de vernis ou de la mixtion de chaux & de cendres de fougeres.

Il est bon d'observer en general que la porcelaine dont le vernis porte beaucoup de cendres de fougeres, doit être cuite à l'endroit tempéré de fourneau; c'est-à-dire, ou après les trois premiers rangs, ou dans le bas à la hauteur d'un pied ou d'un pied & demi: si elle étoit cuite au haut du fourneau, la cendre se fondroit avec précipitation, & couleroit au bas de la porcelaine. Il en est de même du rouge à l'huile, du rouge soufflé, & du *long tsi ven*, à cause de la grenaille de cuivre qui entre dans la composition de ces vernis. Au contraire on doit cuire au haut

du fourneau la porcelaine à laquelle on a donné simplement le *tsoui yeou* : c'est, comme je l'ai dit, ce vernis qui produit une multitude de veines, en sorte que la porcelaine semble être de pieces rapportées.

XIII. Il y a quelque chose à réformer dans ce que j'ai dit autrefois des couleurs qu'on donne à la porcelaine qui se cuit une seconde fois. Mais avant que d'entrer dans le détail, il est bon d'expliquer quelle est la proportion & la mesure des poids de la Chine, & c'est par où je vais commencer.

Le *Kin* ou la livre Chinoise est de 16. onces qui s'appellent *Leams* ou *Taels*.

Le *Leam* ou *Tael* est une once Chinoise.

Le *Tsien* ou le *Mas* est la dixiéme partie du *Leam* ou *Tael*.

Le *Fuen* est la dixiéme partie du *Tsien* ou du *Mas*.

Le *Ly* est la dixiéme partie du *Fuen*.

Le *Hao* est la dixiéme partie du *Ly*.

Le rouge de couperose qu'on employe sur les porcelaines recuites, se fait de la maniere que je l'ai expliqué, avec de la couperose appellée *tsao fan*. Mais comment cette couleur se compose-t-elle ? C'est sur quoi je vais vous satisfaire.

Sur un *tael* ou *leam* de ceruse, on met deux *mas* de ce rouge : on passe la ceruse & le rouge par un tamis, & on les mêle ensemble à sec : ensuite on les lie l'un à l'autre avec de l'eau empreinte d'un peu de colle de vache, qui se vend réduite à la consistance de la colle de poisson. Cette colle fait qu'en peignant la porcelaine, le rouge s'y attache, & ne coule pas. Comme les couleurs, si on les appliquoit trop épaisses, ne manqueroient pas de produire des inégalitez sur la porcelaine, on a soin de tems en tems de tremper d'une main legere le pinceau dans l'eau, & ensuite dans la couleur dont on veut peindre.

Pour faire de la couleur blanche, sur un *leam* de ceruse, on met trois *mas* & trois *fuen* de poudre de cailloux des plus transparens, qu'on a calcinez après les avoir luttez dans une quaisse de porcelaine enfoüie dans le gravier du fourneau, avant que de le chauffer. Cette poudre doit être impalpable. On se sert d'eau simple, sans y mêler de la colle pour l'incorporer avec la ceruse.

On fait le verd foncé, en mettant sur un *taël* de ceruse trois *mas* & trois *fuen* de poudre de cailloux avec huit *fuen* ou près d'un *mas* de *tom hoa pien*, qui n'est autre chose que la crasse qui sort du cuivre lorsqu'on le fond. Je viens d'apprendre qu'en employant le *tom hoa pien* pour faire le verd, il faut le laver & en séparer avec soin la grenaille de cuivre qui s'y trouveroit mêlée, & qui n'est pas propre pour le verd : il ne faut y employer que les écailles, c'est-à-dire, les parties de ce métal qui se séparent lorsqu'on le met en œuvre.

Pour ce qui est de la couleur jaune, on la fait en mettant sur un *taël* de ceruse, trois *mas* & trois *fuen* de poudre de cailloux, &

un *fuen* huit *ly* de rouge pur qui n'ait point été mêlé avec la ceruse. Un autre ouvrier m'a dit que pour faire un beau jaune, il mettoit deux *fuen* & demi de ce rouge primitif.

Un *tael* de ceruse, trois *mas* & trois *fuen* de poudre de cailloux, & deux *ly* d'azur forment un bleu foncé qui tire sur le violet. Un des ouvriers que j'ai consulté pense qu'il faut huit *ly* de cet azur.

Le mêlange de verd & de blanc, par exemple, d'une part de verd sur deux parts de blanc, fait le verd d'eau qui est trés-clair.

Le mêlange du verd & du jaune, par exemple, de deux tasses de verd foncé sur une tasse de jaune, fait le verd *coulou*, qui ressemble à une feüille un peu fannée.

Pour faire le noir, on délaye l'azur dans de l'eau : il faut qu'il soit tant soit peu épais : on y mêle un peu de colle de vache macerée dans de la chaux, & cuite jusqu'à consistance de colle de poisson. Quand on a peint de ce noir la porcelaine qu'on veut recuire, on couvre de blanc les endroits noirs. Durant la cuite ce blanc s'incorpore dans le noir, de même que le vernis ordinaire s'incorpore dans le bleu de la porcelaine commune.

Il y a une autre couleur appellée *tsiu* : ce *tsiu* est une pierre ou mineral qui ressemble assez au vitriol Romain. Selon la réponse qu'on a faite à mes questions, je n'aurois pas de peine à croire que ce mineral se tire de quelque mine de plomb, & que portant avec soi des esprits, ou plûtôt des parcelles imperceptibles de plomb, il s'insinuë de lui-même dans la porcelaine sans le secours de la ceruse, qui est le vehicule des autres couleurs qu'on donne à la porcelaine recuite.

C'est de ce *tsiu* qu'on fait le violet foncé. On en trouve à Canton, & il en vient de Pekin. Mais ce dernier est bien meilleur. Aussi se vend-il un *tael* huit *mas* la livre : c'est-à-dire 9. liv. Le *tsiu* se fond, & quand il est fondu ou ramolli, les Orfévres l'appliquent en forme d'émail sur des ouvrages d'argent. Ils mettront, par exemple, un petit cercle de *tsiu* dans le tour d'une bague ; ou bien ils en rempliront le haut d'une aiguille de tête, & l'y enchasseront en forme de pierrerie. Cette espece d'émail se détache à la longue : mais on tâche d'obvier à cet inconvenient, en le mettant sur une légere couche de colle de poisson ou de vache.

Le *tsiu* de même que les autres couleurs dont je viens de parler, ne s'employe que sur la porcelaine qu'on recuit. Telle est la préparation du *tsiu* : on ne le rôtit point comme l'azur, mais on le brise, & on le réduit en une poudre tres fine : on le jette dans un vase plein d'eau, on l'y agite un peu, ensuite on jette cette eau où il se trouve quelques salletez, & l'on garde le cristal qui est tombé au fond du vase. Cette masse ainsi délayée perd sa belle couleur, & paroît au dehors un peu cendrée. Mais le *tsiu* recouvre sa couleur violette dès que la porcelaine est cuite. On conserve le *tsiu* aussi long-tems qu'on le souhaitte. Quand

on veut peindre en cette couleur quelque vase de porcelaine, il suffit de la délayer avec de l'eau, en y mêlant, si l'on veut, un peu de colle de vache ; ce que quelques-uns ne jugent pas nécessaire. C'est dequoi l'on peut s'instruire par l'essai.

Pour dorer ou argenter la porcelaine, on met deux *fuen* de ceruse sur deux *mas* de feüilles d'or ou d'argent, qu'on a eu soin de dissoudre. L'argent sur le vernis *tse kin* a beaucoup d'éclat. Si l'on peint les unes en or, & les autres en argent, les pieces argentées ne doivent pas demeurer dans le petit fourneau autant de tems que les pieces dorées : autrement l'argent disparoîtroit avant que l'or eût pû atteindre le dégré de cuite qui lui donne son éclat.

XIV. Il y a ici une espece de porcelaine colorée, qui se vend à meilleur compte que celle qui est peinte avec les couleurs dont je viens de parler. Peut-être que les connoissances que j'en vais donner, seront de quelque utilité en Europe par rapport à la fayence, supposé qu'on ne puisse pas atteindre à la perfection de la porcelaine de la Chine. Pour faire ces sortes d'ouvrages, il n'est pas nécessaire que la matiere qui doit y être employée, soit si fine : on prend des tasses qui ont déja été cuites dans le grand fourneau, sans qu'elles ayent été vernissées, & par conséquent qui sont toutes blanches, & qui n'ont aucun lustre : on les colore en les plongeant dans le vase où est la couleur préparée quand on veut qu'elles soient d'une même couleur : mais si on les souhaitte de differentes couleurs, tels que sont les ouvrages appellez *hoam lou houan*, qui sont partagez en espece de paneaux, dont l'un est verd, l'autre jaune, &c. on applique ces couleurs avec un gros pinceau. C'est toute la facon qu'on donne à cette porcelaine, si ce n'est qu'après la cuite, on met en certains endroits un peu de vermillon, comme par exemple sur le bec de certains animaux ; mais cette couleur ne se cuit pas, parce qu'elle disparoîtroit au feu : aussi est-elle de peu de durée. Quand on a appliqué les autres couleurs, on recuit la porcelaine dans le grand fourneau avec d'autres porcelaines qui n'ont pas encore été cuites, il faut avoir soin de la placer au fond du fourneau & au dessous du soupirail, où le feu a moins d'activité, parce qu'un grand feu anéantiroit les couleurs.

Les couleurs propres de cette sorte de porcelaine se préparent de la sorte : pour faire la couleur verte, on prend du *tom hoa pien*, du salpêtre, & de la poudre de caillou : on n'a pas pû me dire la quantité de chacun de ces ingrédiens : quand on les a reduits séparément en poudre impalpable, on les délaye, & on les unit ensemble avec de l'eau.

L'azur le plus commun, avec le salpêtre & la poudre de caillou, forment le violet.

Le jaune se fait en mettant, par exemple, trois *mas* de rouge de couperose sur trois onces de poudre de caillou, & sur trois onces de ceruse.

Pour faire le blanc, on met sur quatre *mas* de poudre de caillou un *tael* de ceruse. Tous ces ingrédiens se délayent avec de l'eau. C'est-là tout ce que j'ai pû apprendre touchant les couleurs de cette sorte de porcelaine, n'ayant point parmi mes Néophytes d'ouvriers qui y travaillent.

XV. Quand j'ai parlé des fourneaux où l'on cuit de nouveau la porcelaine qui est peinte, j'ai dit * qu'on faisoit des piles de porcelaines, qu'on mettoit les petites dans les grandes, & qu'on les rangeoit ainsi dans le fourneau. Sur quoi je dois ajoûter qu'il faut prendre garde que les pieces de porcelaine ne se touchent les unes les autres par les endroits qui sont peints : car ce seroit autant de pieces perduës. On peut bien appuyer le bas d'une tasse sur le fond d'une autre tasse quoiqu'il soit peint, parce que les bords du fond de la tasse emboëtée n'ont point de peinture : mais il ne faut pas que le côté d'une tasse touche le côté de l'autre : ainsi quand on a des porcelaines qui ne peuvent pas aisément s'emboëter les unes dans les autres, comme sont, par exemple, de longues tasses propres à prendre du Chocolat, nos ouvriers les rangent de la maniere suivante. Sur un lit de ces porcelaines qui garnit le fond du fourneau, on met une couverture ou de plaques faites de la terre dont on construit les fourneaux, ou même des pieces de quaisses de porcelaines : car à la Chine tout se met à profit. Sur cette couverture on dispose un autre lit de ces porcelaines, & on continuë de les placer de la sorte jusqu'au haut du fourneau.

XVI. Je n'étois pas assez bien instruit quand j'ai dit † qu'on connoît que la porcelaine peinte ou dorée est cuite, lorsqu'on voit que l'or & les couleurs saillissent avec tout leur éclat. J'ai été détrompé par des connoissances plus sûres. Les couleurs ne se distinguent qu'après que la porcelaine recuite a eu le loisir de se refroidir. On juge que la porcelaine qu'on a fait cuire dans un petit fourneau, est en état d'être retirée, lorsque regardant par l'ouverture d'en haut, on voit jusqu'au fond toutes les porcelaines rouges par le feu qui les embrase, qu'on distingue les unes des autres les porcelaines placées en pile, que la porcelaine peinte n'a plus les inégalitez que formoient les couleurs, & que ces couleurs se sont incorporées dans le corps de la porcelaine, de même que le vernis donné sur le bel azur s'y incorpore par la chaleur des grands fourneaux.

Pour ce qui est de la porcelaine qu'on recuit dans de grands fourneaux, on juge que la cuite est parfaite, 1°. lorsque la flamme qui sort n'est plus si rouge, mais qu'elle est un peu blancheâtre. 2°. Lorsque regardant par une des ouvertures, on apperçoit que les quaisses sont toutes rouges. 3°. Lorsqu'après avoir ouvert une quaisse d'en haut, & en avoir tiré une porcelaine, on voit, quand elle est refroidie, que le vernis & les

* XII. Recueil pag. 311. † XII. Recueil pag. 331.

couleurs sont dans l'état où on les souhaitte. 4°. Enfin lorsque regardant par le haut du fourneau, on voit que le gravier du fond est luisant. C'est par tous ces indices qu'un ouvrier juge que la porcelaine est arrivée à la perfection de la cuite.

XVII. Quand on veut que le bleu couvre entierement le vase, on se sert de *leao* ou d'azur préparé & délayé dans de l'eau à une juste consistance ; & on y plonge le vase. Pour ce qui est du bleu soufflé appellé *tsoui tsim*, on y employe le plus bel azur préparé de la maniere que je l'ai expliqué : on le souffle sur le vase, & quand il est sec, on donne le vernis ordinaire, ou seul, ou mêlé de *tsoui yeou*, si l'on veut que la porcelaine ait des veines.

Il y a des ouvriers lesquels sur cet azur, soit qu'il soit soufflé ou non, tracent des figures avec la pointe d'une longue aiguille : l'aiguille leve autant de petits points de l'azur sec, qu'il est nécessaire pour representer la figure : puis ils donnent le vernis. Quand la porcelaine est cuite, les figures paroissent peintes en miniature.

XVIII. Il n'y a point tant de travail qu'on pourroit se l'imaginer, aux porcelaines sur lesquelles on voit en bosse des fleurs, des Dragons, & de semblables figures. On les trace d'abord avec le burin sur le corps du vase, ensuite on fait aux environs de legeres entaillures qui leur donnent du relief ; après quoi on donne le vernis.

XIX. Quand j'ai parlé dans mon premier écrit * de la maniere dont le *leao* ou l'azur se prépare, j'ai omis deux ou trois particularitez qui méritent de l'attention. 1°. Qu'avant de l'ensevelir dans le gravier du fourneau, où il doit être rôti, il faut le bien laver, afin d'en retirer la terre qui y est attachée. 2°. Qu'il faut l'enfermer dans une quaisse à porcelaine bien luttée. 3°. Que lorsqu'il est rôti, on le brise, on le passe par le tamis, on le met dans un vase vernissé ; qu'on y répand de l'eau boüillante, qu'après l'avoir un peu agité, on en ôte l'écume qui surnage, qu'ensuite on verse l'eau par inclination. Cette préparation de l'azur avec de l'eau boüillante doit se rénouveller jusqu'à deux fois. Après quoi on prend l'azur ainsi humide, & réduit en une espece de pâte fort déliée, pour le jetter dans un mortier, où on le broye pendant un tems considerable.

On m'a assuré que l'azur se trouvoit dans les minieres de charbons de pierre, ou dans des terres rouges voisines de ces minieres. Il en paroît sur la superficie de la terre, & c'est un indice assez certain qu'en creusant un peu avant dans le même lieu, on en trouvera infailliblement. Il se présente dans la mine par petites pieces grosses à peu près comme le gros doigt de la main, mais plattes & non pas rondes. L'azur grossier est assez commun, mais le fin est très-rare, & il n'est

* Page 302. du XII. Recueil.

pas aisé de les discerner à l'œil. Il faut en faire l'épreuve, si l'on ne veut pas y être trompé. Cette épreuve consiste à peindre une porcelaine & à la cuire. Si l'Europe fournissoit du beau *leao* ou de l'azur, & du beau *tsiu* qui est une espece de violet, ce seroit pour *Kim te tchim* une marchandise de prix & d'un petit volume pour le transport, & on en rapporteroit en échange la plus belle porcelaine. J'ai déja dit que le *tsiu* se vendoit un *tael* huit *mas* la livre, c'est-à-dire, neuf francs. On vend deux *taels* la boëte du beau *leao* qui n'est que de dix onces, c'est-à-dire, vingt sols l'once.

XX. On a essayé de peindre en noir quelques vases de porcelaine avec l'ancre la plus fine de la Chine: mais cette tentative n'a eu aucun succès. Quand la porcelaine a été cuite, elle s'est trouvée très-blanche. Comme les parties de ce noir n'ont pas assez de corps, elles s'étoient dissipées par l'action du feu; ou plûtôt elles n'avoient pas eu la force de pénétrer la couche de vernis, ni de produire une couleur differente du simple vernis.

Je finis ces remarques, mon Reverend Pere, en recommandant à vos prieres la Chrétienté de *Kim te tchim*, qui est composée d'un grand nombre d'ouvriers en porcelaine. Le Seigneur qui m'en a confié le soin, me donne la consolation, toutes les fois que je m'y transporte, de la voir croître de plus en plus. Pendant un mois de séjour que j'y ai fait depuis peu, j'ai administré les Sacremens à un grand nombre de fervens Chrétiens, & parmi ceux à qui j'ai conféré le Baptême, il y avoit près de cinquante Adultes. Le progrès de la foi y seroit beaucoup plus grand, si un Missionnaire y fixoit sa demeure: il faudroit agrandir l'Eglise, & y entretenir deux ou trois Catechistes. Il n'en coûteroit pour cela chaque année qu'une somme modique. Peut-être quelque personne pieuse admirant les beaux ouvrages que *Kim te tchim* fournit à toute l'Europe, aura-t-elle le zele de consacrer une légere portion de ses biens à la conversion de tant d'ouvriers qui y travaillent. Je suis dans la participation de vos saints sacrifices, &c.

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